LP1 LABELPRINTER USER MANUAL

Pinnacle Technology Corp.

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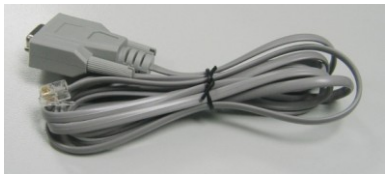
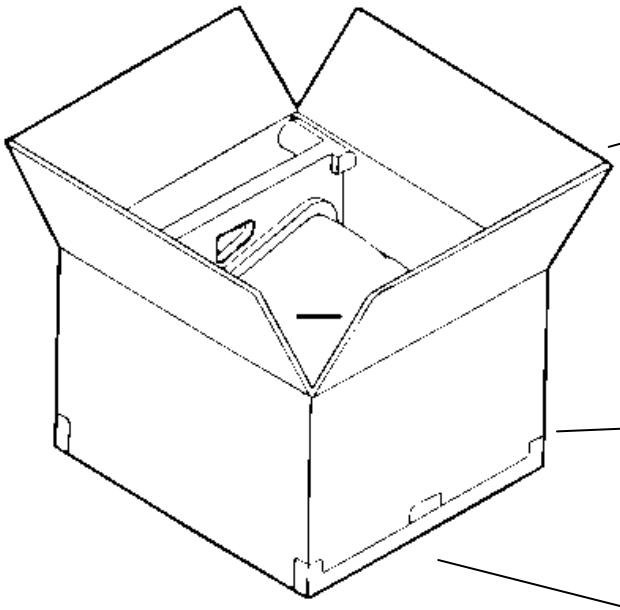
1 UNPACKING THE LP LABEL PRINTER

LP1 Printer



4P9D Cable



PC Disk

User manual

Fuses

2 SUMMARIZATION

2.1 Technical Specification

Optional type		LP12BX	LP12CX
Memory capacity		Standard 4Mbit(extendable)	
Thermal printer head		56mm width, 203 Dot/in	72mm width, 203 Dot/in
Printing speed		70 mm/s (25℃)	70 mm/s (25℃)
Paper Specification	Type	Thermal label paper	
	Paper width	61.5±0.5mm	79.5±0.5mm
Printing contents		EAN 18/EAN 13 barcode, PLU name, unit price, total price, weight, graphic, discount mark, packing date, expiration date, trade mark, head message, bottom message, etc.	
Storing data		10000 PLU information, 12000 sets information, 42 sets of barcode label file (120(length)*50(width))	
Interface		PS2*1、RS232*1、Ethernet *1 、Wireless 2.4G Wireless 433M、 Bluetooth	
Keystroke		36*2 hotkeys、 4 function keys	
Display		65*132	
Optional function		Linerless label printing module、partition machine	
Power supply		AC 18V 1.5A(AC 115V/220/240 50/60Hz Adaptor)	
Operating temperature		0℃~40℃,5%~85%R.H	
Stock environment		0℃~40℃,5%~90%R.H	
Dimensions		145*286*179(mm)	
Weight		3KG	

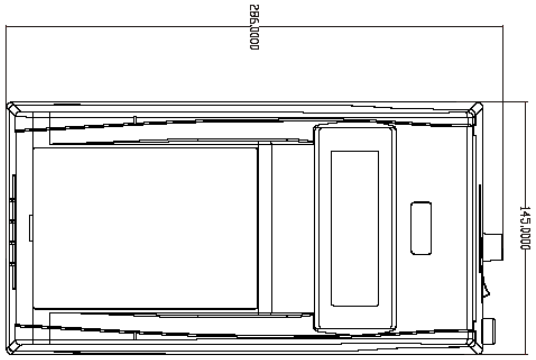
2.2 Advanced Features

- Provide the label graph edition software for any label design with the scope of 30*30mm ~ 55*60 size.
- With auto label backing re-winder, can continuously printing labels and spit out the next label automatically.
- Integrate an auto-packing system with platform scale (with communication function).
- Support UNICODE and can work with back office s/w based on NT, UNIX, INTERNET.
- Can select any kinds of font and language in PC editor application, and download for printing.
- Printing darkness can be adjusted according to label sensitivity, and with auto compensation of voltage and temperature changes, makes the lifetime of thermal head 2-3 times longer than normal machine's.
- Support 60*40mm paper roll with 1000pcs labels while other competitive printer in the market only can load paper roll with max.

- Capable of printing label, background and PLU name in different language for different countries.
- With 65*132 graphic LCD to display commodity name, price, weight, amount and other details information.

2.3 Dimension

Unit: mm

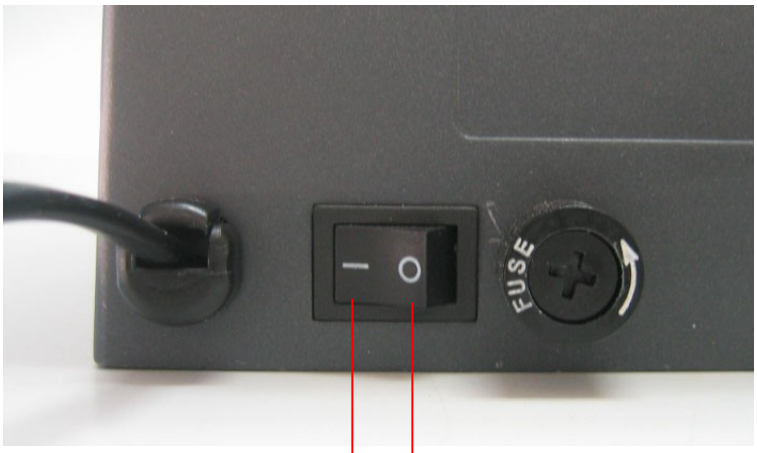


2.4 Appearance

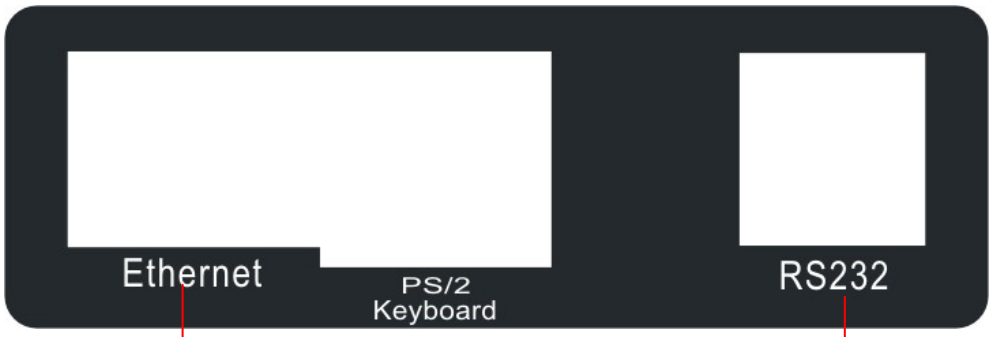
3 inch

2 inch

2.5 Power Switch and Communication Interface



ON | OFF

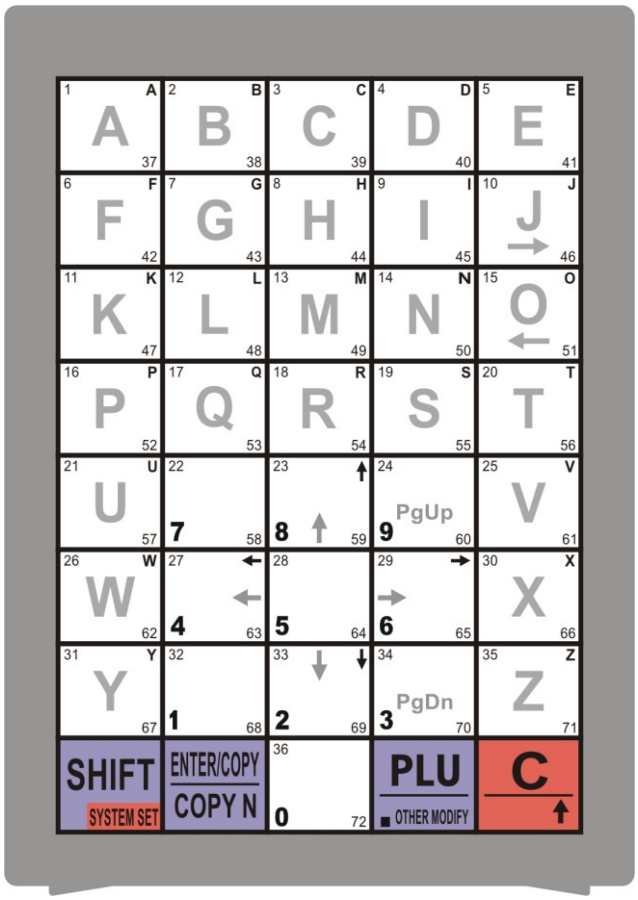


Use to download data from PC or connect to scale

Use to connect to peripheral equipment, such as scale

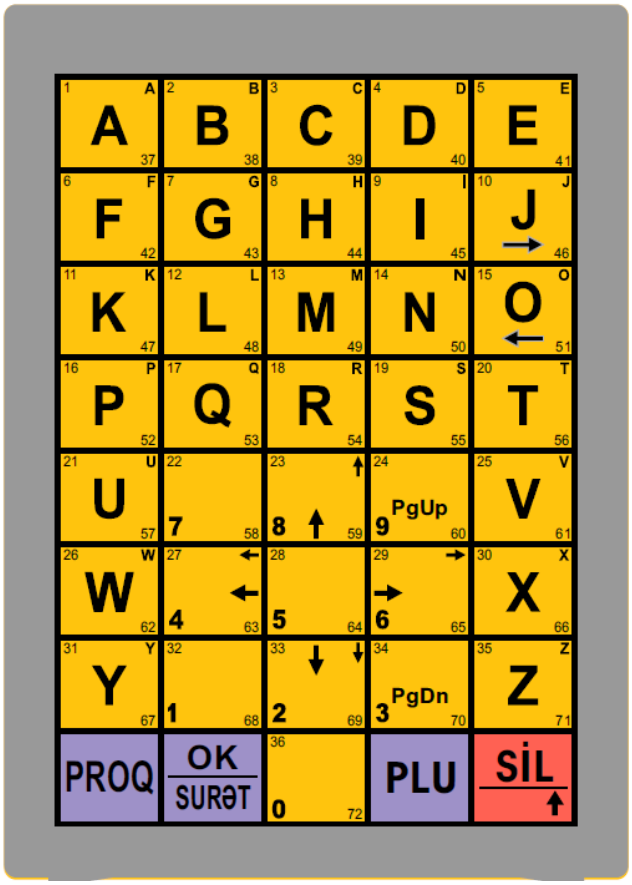
3 KEYBOARD LAYOUT

◆ **ENGLISH VERSION**



SHIFT / SYSTEM SET	Shift the key function. Press the key and hold it for 2 seconds to enter system set mode.
ENTER/COPY / COPY N	Confirm key. Press key [SHIFT][COPY] to copy the last label, and stops until you press key [C].
PLU / OTHER MODIFY	Decimal point. Combine with numerical key shift digits to bar code number.
C	Clear data. Paper feeding.

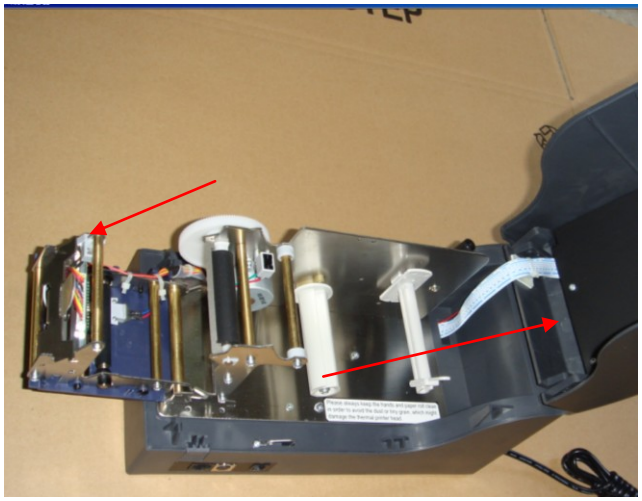
◆ **For Azerbaijan only**



PROQ	SHIFT SYSTEM SET	Shift the key function. Press the key and hold it for 2 seconds to enter system set mode.
OK SURƏT	ENTER/COPY COPY N	Confirm key. Press key [SHIFT][COPY] to copy the last label, and stops until you press key [C].
PLU	PLU OTHER MODIFY	Decimal point. Combine with numerical key shift digits to bar code number.
SİL	C	Clear data. Paper feeding.

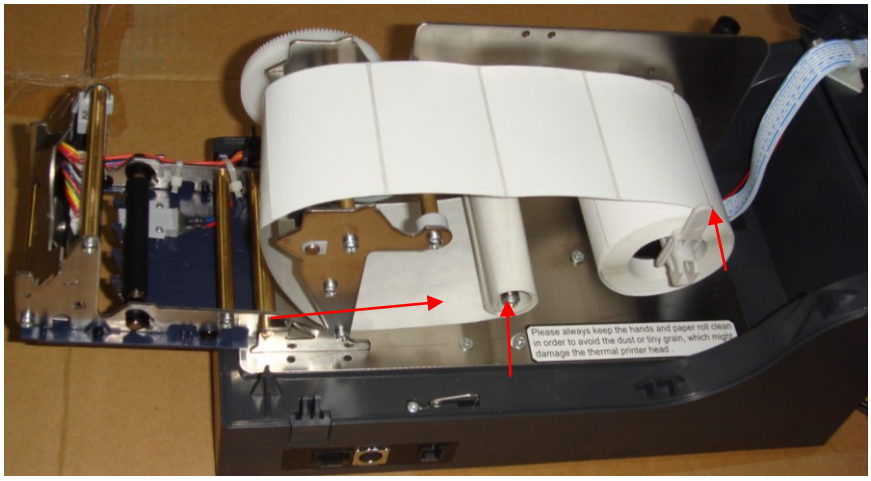
4 HOW TO INSTALL PAPER

1. Follow the arrowhead direction and push the two side buttons.



2. Open the upper cover and open the printer head

➢ **Label paper installation**


Please always keep the hands and paper roll clean
in order to avoid the dust or tiny grain, which might
damage the thermal printer head .

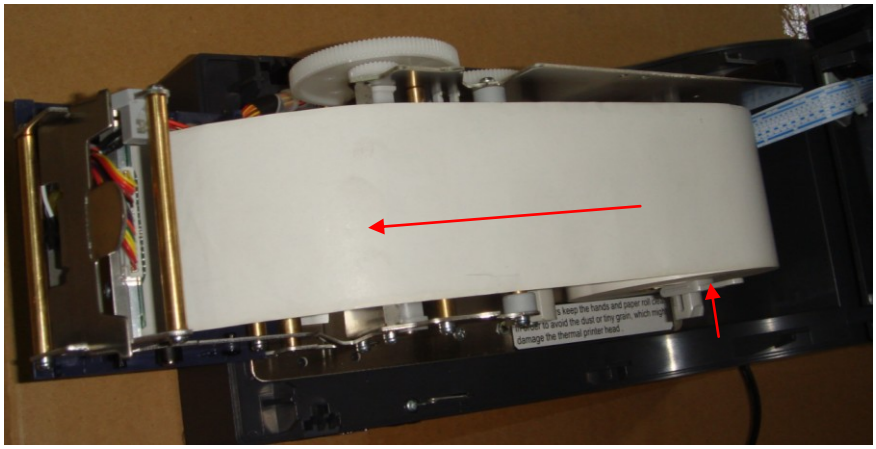
3. Roll paper like the picture shows , lock the paper edge on the winder and shut up the flake

Please always keep the hands and paper roll clean
in order to avoid the dust or tiny grain, which might
damage the thermal printer head .

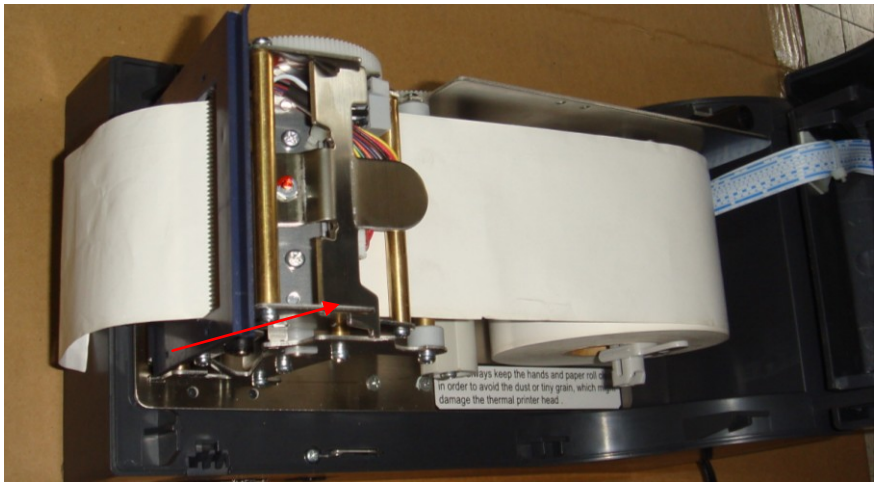
4. Close the printer head

5. Close the cover

- **Receipt paper installation**



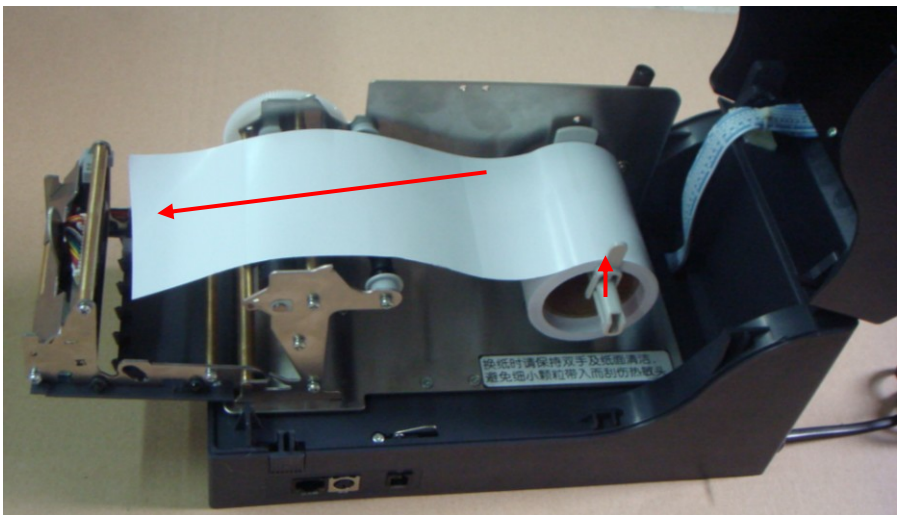
Load the receipt paper like the picture shows and then shut up the flake



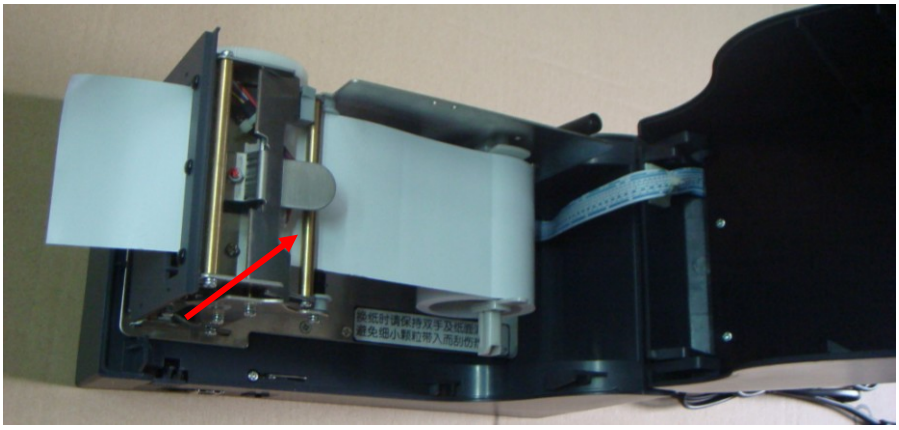
Close the printer head

Close the cover

➢ **Lineless paper installation**



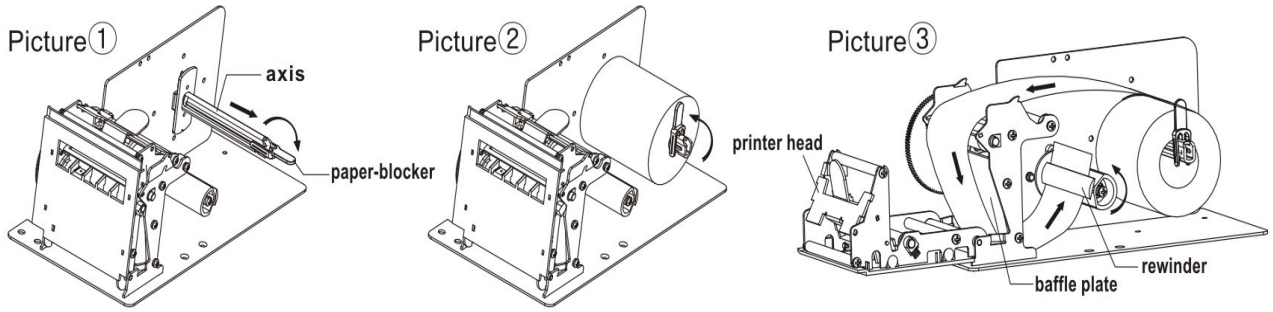
Load the receipt paper like the picture shows and then shut up the flake



Close the printer head

Close the cover

- **Label paper installation（Mechanism picture ）**

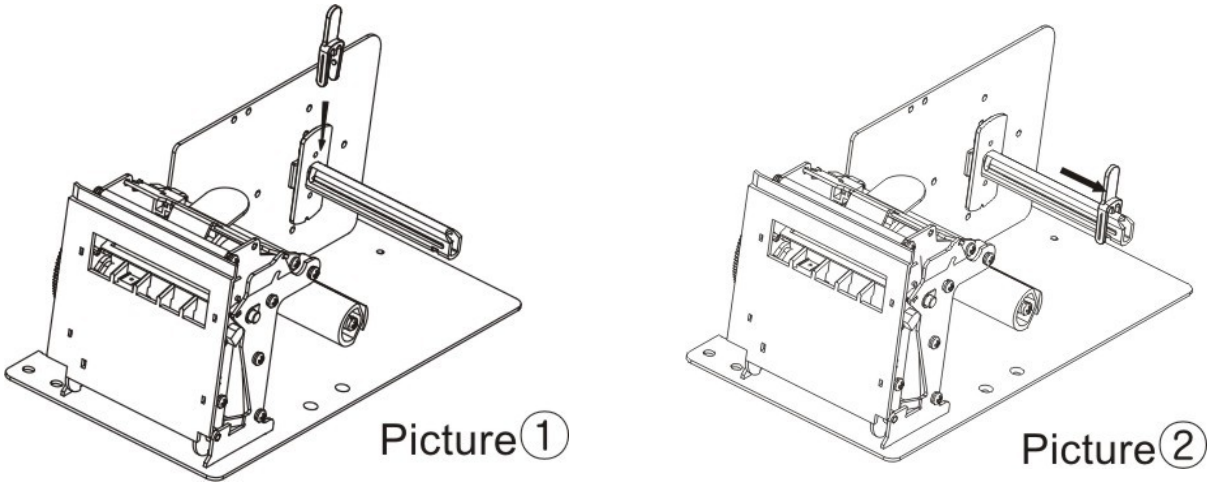


label paper installation:

1. Parallelly pull the paper-blocker to the end of the axis, and then put down the paper-blocker. As shows in Picture ①.
2. Fit the paper roll into the axis, put up the paper-blocker and parallelly push it to the paper roll until fixed. As shows in Picture ②.
3. Open the printer head. Rip off the first several labels, and let the released paper cross the baffle plate and then insert it to the rewinder. As shows in Picture ③.

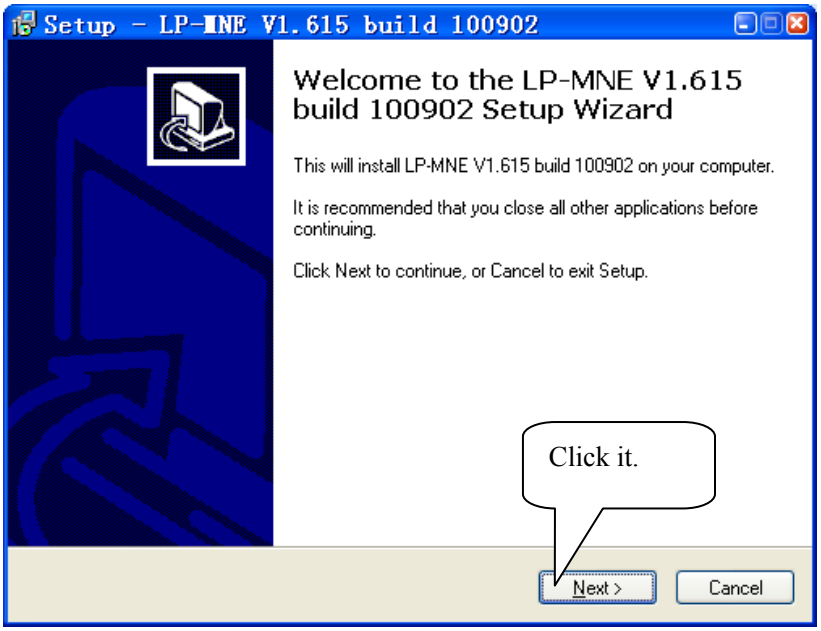
- **Paper-block installation（Mechanism picture ）**

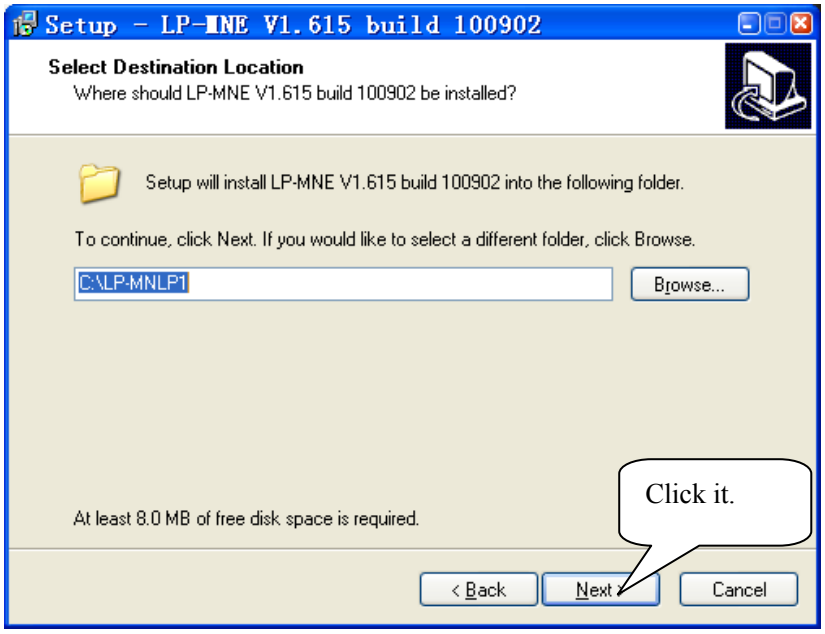
If the paper-blocker drops out, please install it to the axis in time to avoid loss. Clip it to the axis and pull it parallel to the end of the axis as the below pictures show.

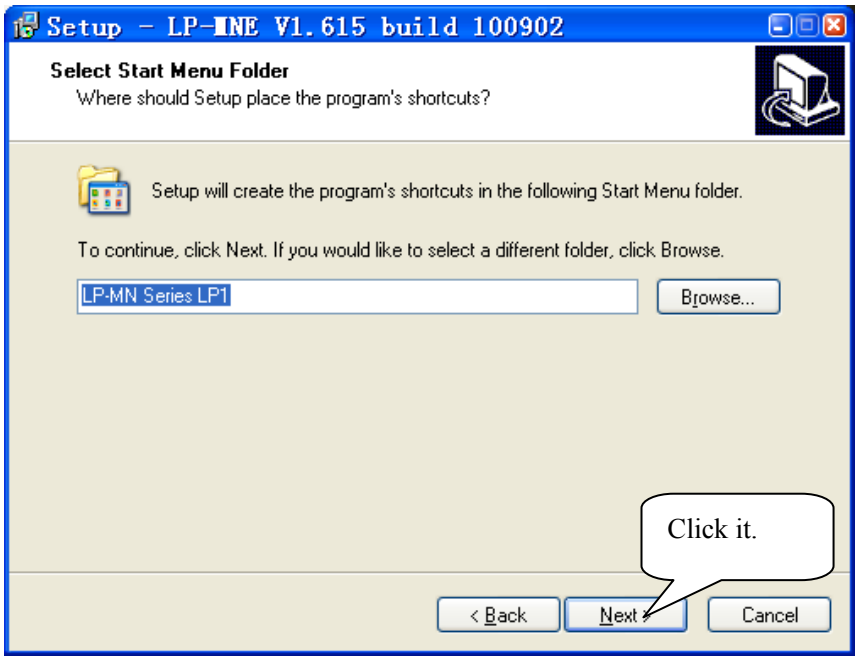


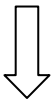
5 PC SOFTWARE INSTALLATION

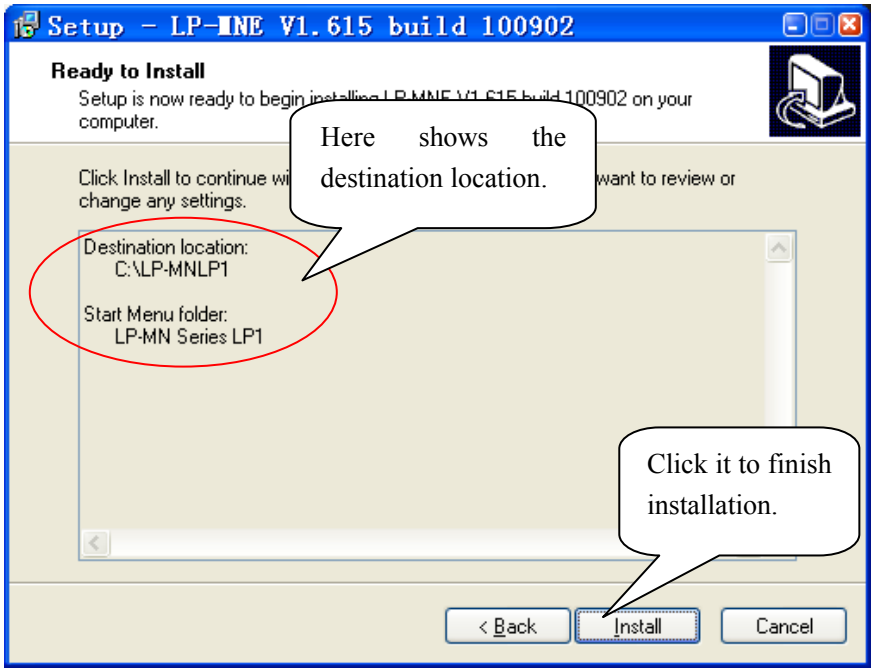
Double click LP-MNE.exe:


Setup - LP-MNE V1.615 build 100902
Welcome to the LP-MNE V1.615 build 100902 Setup Wizard
This will install LP-MNE V1.615 build 100902 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Click it.
Next >
Cancel


Setup - LP-MNE V1.615 build 100902
Select Destination Location
Where should LP-MNE V1.615 build 100902 be installed?
Setup will install LP-MNE V1.615 build 100902 into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\LP-MNLP1
Browse...
At least 8.0 MB of free disk space is required.
Click it.
< Back
Next >
Cancel


Setup - LP-INE V1.615 build 100902
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
LP-MN Series LP1
Browse...
Click it.
< Back
Next >
Cancel

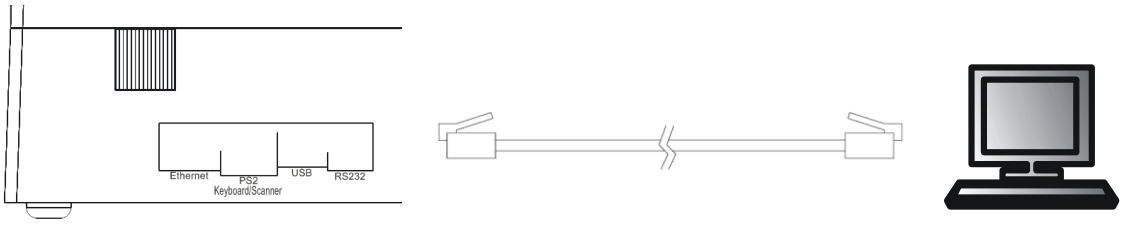



Setup - LP-INE V1.615 build 100902
Ready to Install
Setup is now ready to begin installing LP-MNE V1.615 build 100902 on your computer.
Here shows the destination location.
Click Install to continue wi want to review or change any settings.
Destination location:
C:\LP-MNLP1
Start Menu folder:
LP-MN Series LP1
Click it to finish installation.
< Back
Install
Cancel

6 COMMUNICATION

Before you download data or driver, you need to test the communication.

6.1 Connect LP to PC



LP Ethernet cable PC

6.2 Communication Test

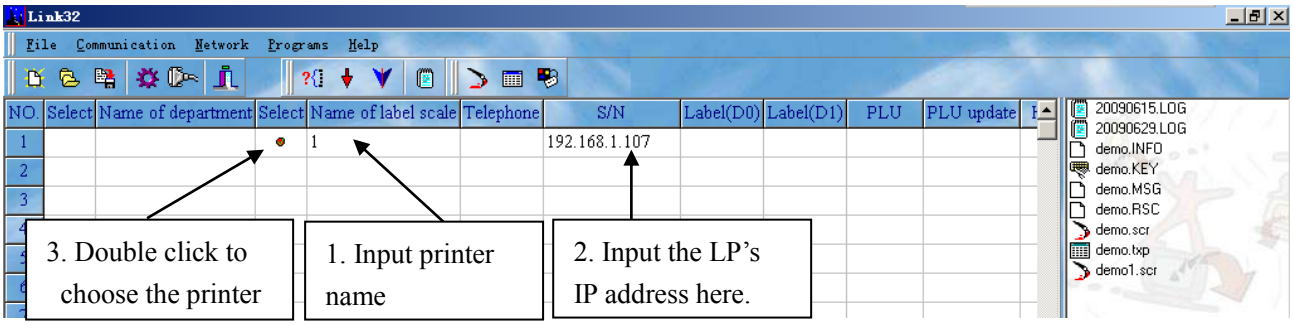
Before you use link 32, you need to test the communication:

1. Connect LP1 to PC: Via Ethernet port
2. Communication Test

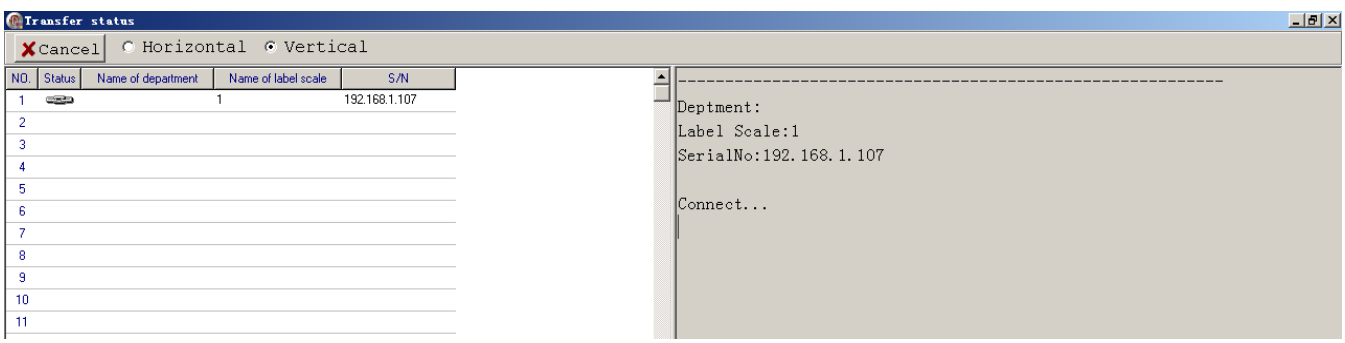
a) Open attached PC software LP-MNE, and choose 'Link32'.

b) Input scale information, we suggest you connect LP to PC via Ethernet port.

c) Make your computer IP address is in the same segment of the LP printer, such as if the LP printer IP address is 192.168.1.87 (the default IP of this printer), then your computer's IP address should be 192.168.1.xxx. You also can re-set the label printer's IP address to make the connection with your PC.



3. Choose the button and click it, then, start to test communication.



<Result>

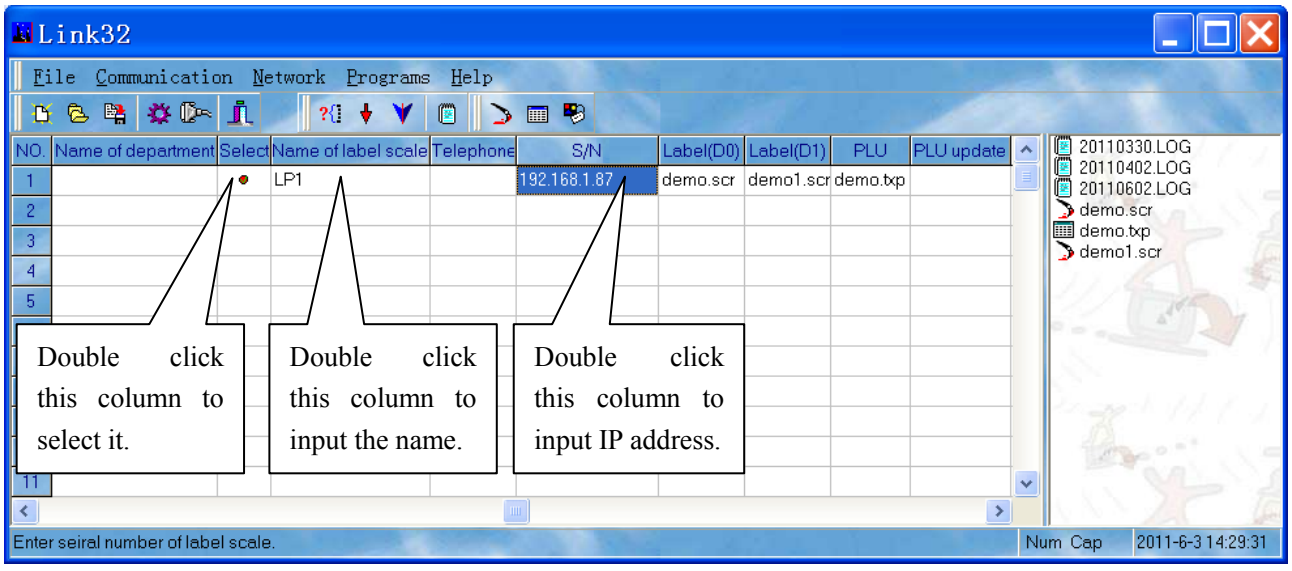
6.3 Re-set label printer IP address

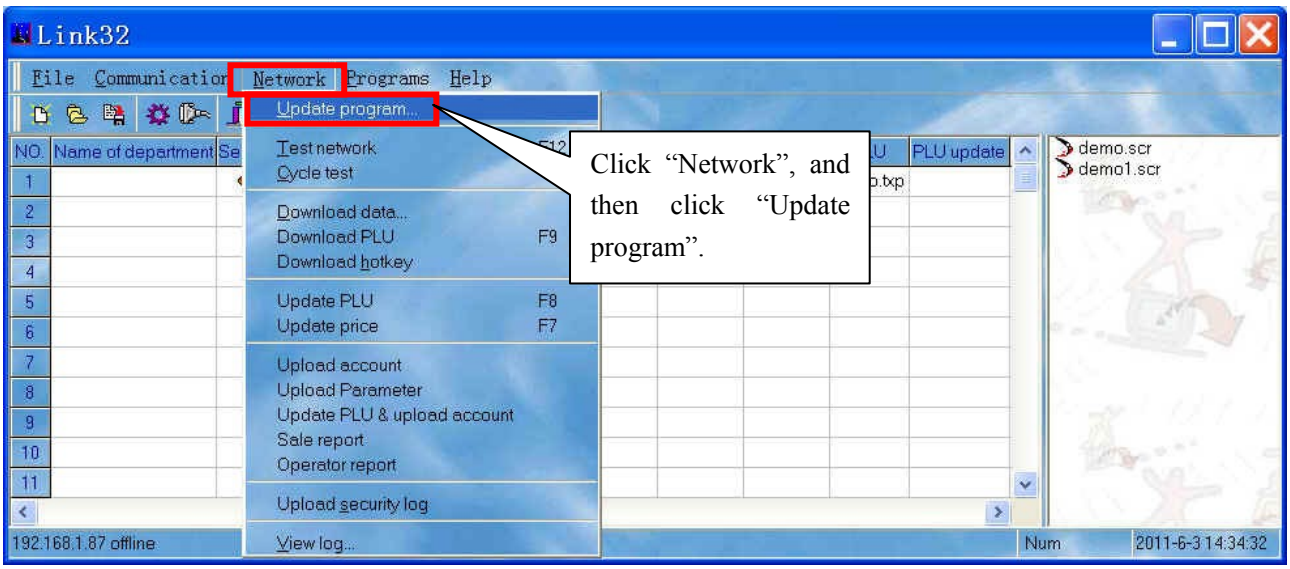
Customers can also make the label printer's IP address to be in the same segment with the PC by re-setting the printer's IP address.

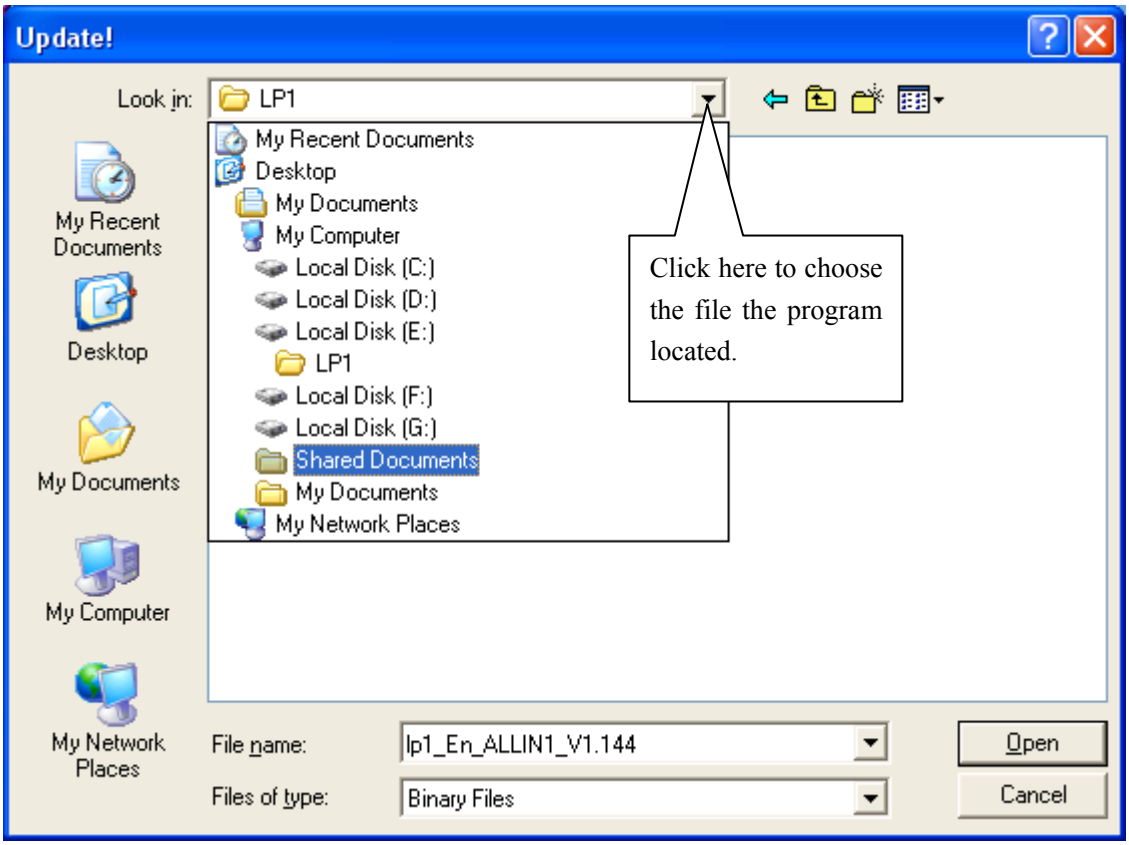
1) Please press [SYSTEM SET] key and hold for seconds to enter into the menu status.
2) Press key [→] and [←] till the LCD display "IP"
3) Please press [Enter] key.
4) Input the new IP address directly but it should be in the same segment with your computer. For example : If your computer IP address is 172.255.1.120, then the label printer IP address you should set is 172.255.1.XXX.

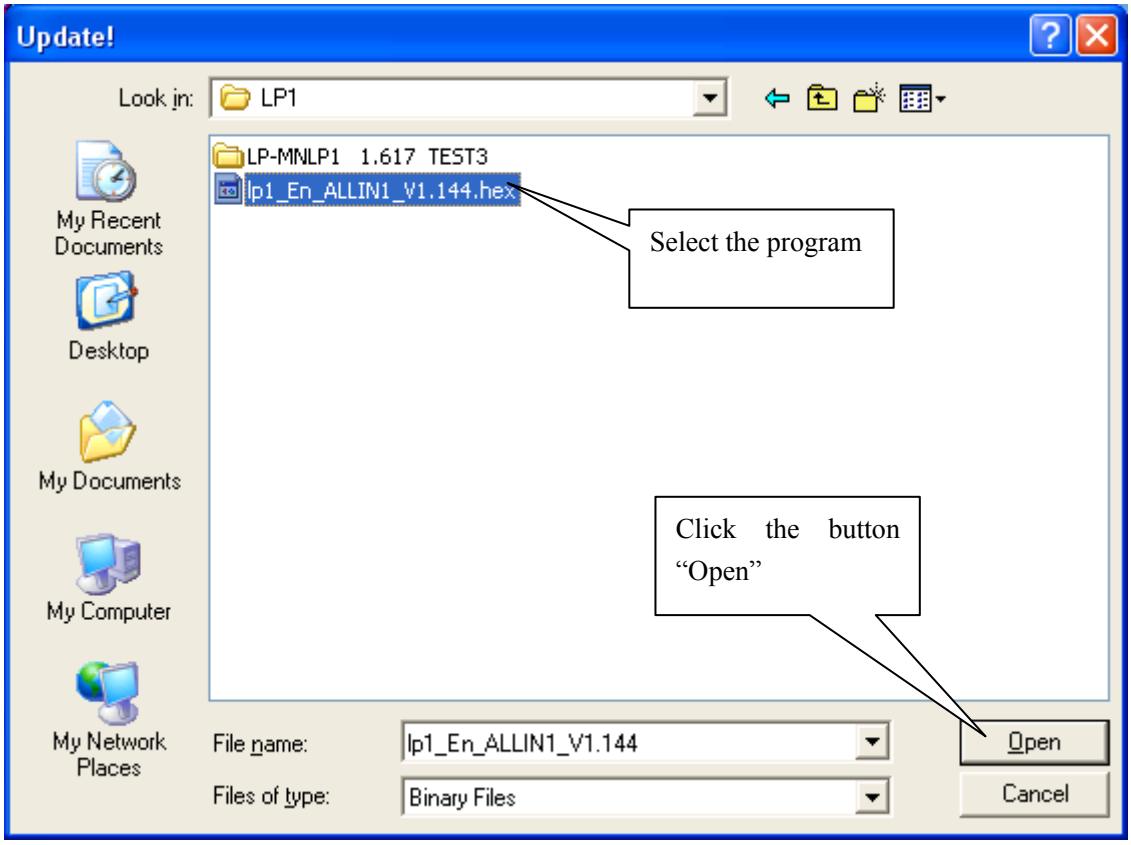
7 HOW TO UPDATE PROGRAM

Double click link32.exe , and follow below steps to update the program.


Link32
File Communication Network Programs Help
NO. Name of department Select Name of label scale Telephone S/N Label(D0) Label(D1) PLU PLU update
1 LP1 192.168.1.87 demo.scr demo1.scr demo.txp
20110330.LOG
20110402.LOG
20110602.LOG
demo.scr
demo.txp
demo1.scr
Double click this column to select it.
Double click this column to input the name.
Double click this column to input IP address.
Enter seiral number of label scale.
Num Cap
2011-6-3 14:29:31

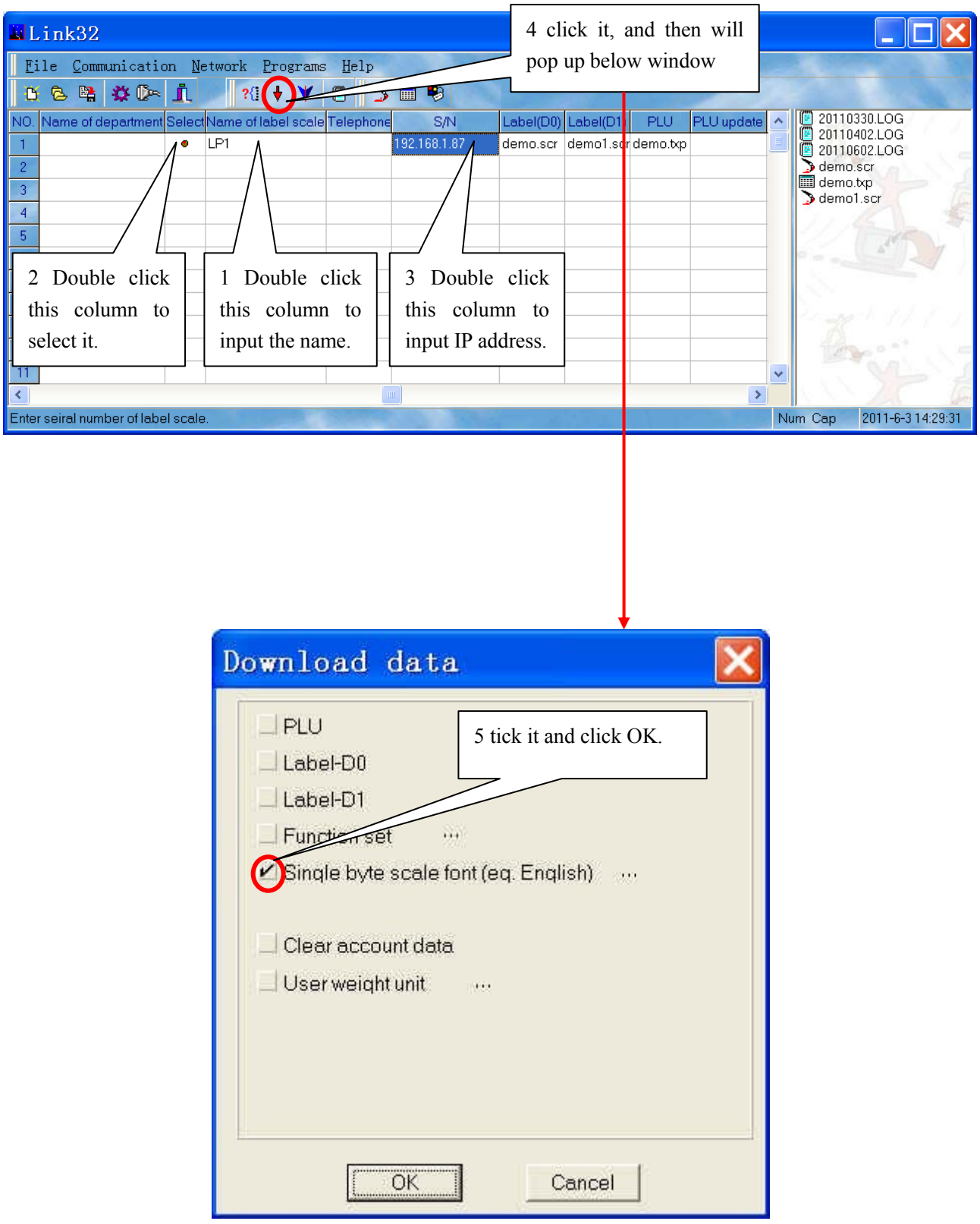

Link32
File
Communication
Network
Programs
Help
Update program...
Test network
Cycle test
Download data...
Download PLU F9
Download hotkey
Update PLU F8
Update price F7
Upload account
Upload Parameter
Update PLU & upload account
Sale report
Operator report
Upload security log
View log...
Click "Network", and then click "Update program".
NO.
Name of department
PLU update
demo.scr
demo1.scr
192.168.1.87 offline
Num
2011-6-3 14:34:32


Update!
Look in:
LP1
My Recent Documents
Desktop
My Documents
My Computer
Local Disk (C:)
Local Disk (D:)
Local Disk (E:)
LP1
Local Disk (F:)
Local Disk (G:)
Shared Documents
My Documents
My Network Places
Click here to choose the file the program located.
File name:
lp1_En_ALLIN1_V1.144
Files of type:
Binary Files
Open
Cancel


Update!
Look in:
LP1
LP-MNLP1 1.617 TEST3
lp1_En_ALLIN1_V1.144.hex
Select the program
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
Click the button "Open"
File name:
lp1_En_ALLIN1_V1.144
Files of type:
Binary Files
Open
Cancel

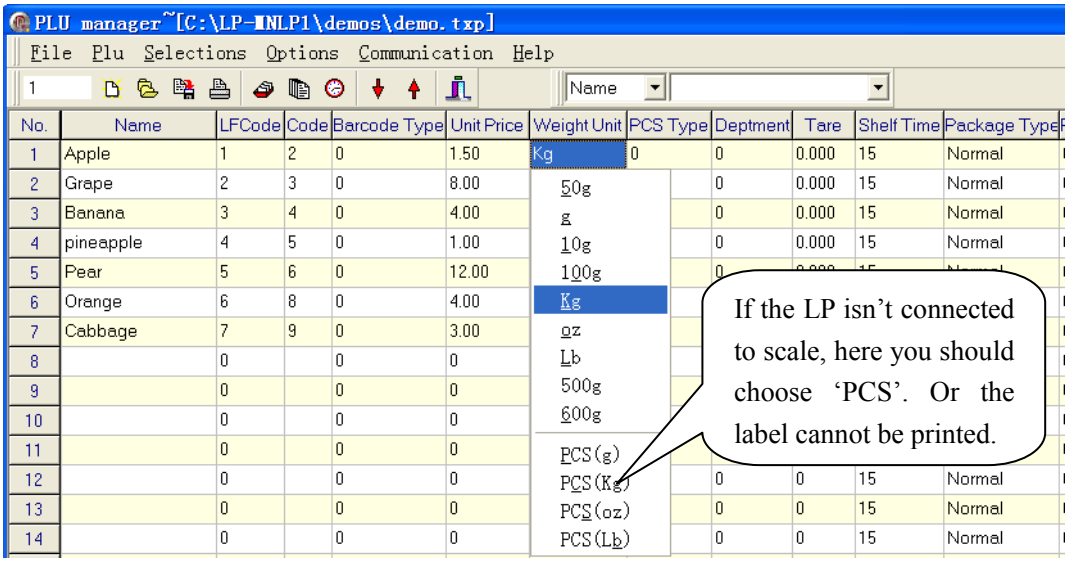
8 HOW TO DOWNLOAD FONT

Choose and click link32, and follow below steps to download the font.

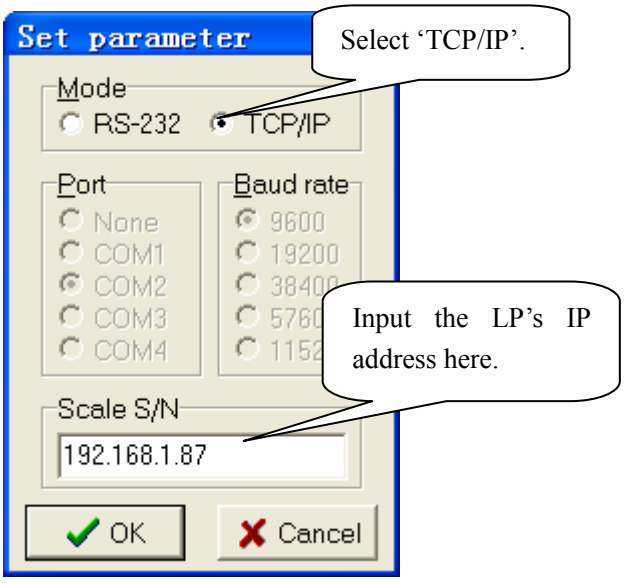


9 HOW TO CREATE PLU DATA

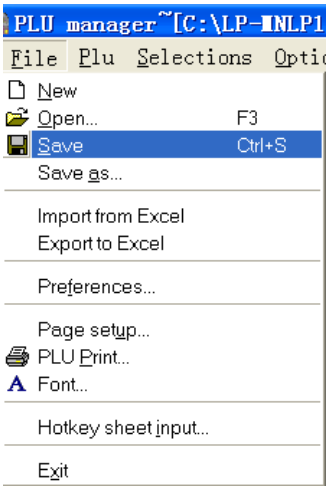
1. Click open “PLU manager” and edit PLU information.


PLU manager~[C:\LP-NLP1\demos\demo.txp]
File Plu Selections Options Communication Help
Name
No. Name LFCode Code Barcode Type Unit Price Weight Unit PCS Type Deptment Tare Shelf Time Package Type
1 Apple 1 2 0 1.50 Kg 0 0 0.000 15 Normal
2 Grape 2 3 0 8.00 0 0.000 15 Normal
3 Banana 3 4 0 4.00 0 0.000 15 Normal
4 pineapple 4 5 0 1.00 0 0.000 15 Normal
5 Pear 5 6 0 12.00
6 Orange 6 8 0 4.00
7 Cabbage 7 9 0 3.00
8 0 0 0
9 0 0 0
10 0 0 0
11 0 0 0
12 0 0 0 0 0 15 Normal
13 0 0 0 0 0 15 Normal
14 0 0 0 0 0 15 Normal
50g
g
10g
100g
Kg
oz
Lb
500g
600g
PCS(g)
PCS(Kg)
PCS(oz)
PCS(Lb)
If the LP isn’t connected to scale, here you should choose ‘PCS’. Or the label cannot be printed.

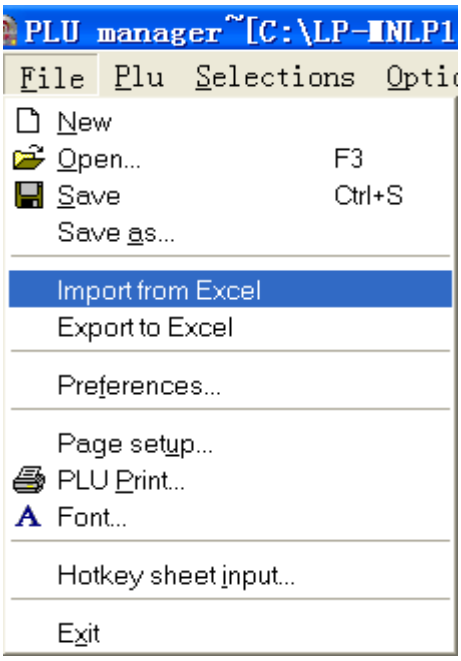
2. Click button



3. Save the PLU data



- You can also import PLU data from excel file

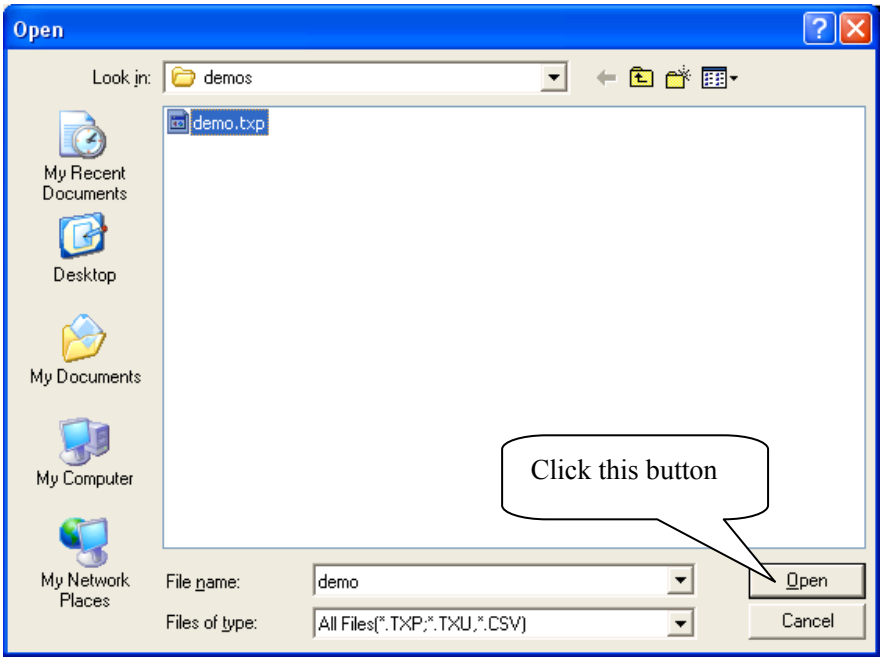


10 HOW TO DOWNLOAD PLU TO LP1 PRINTER

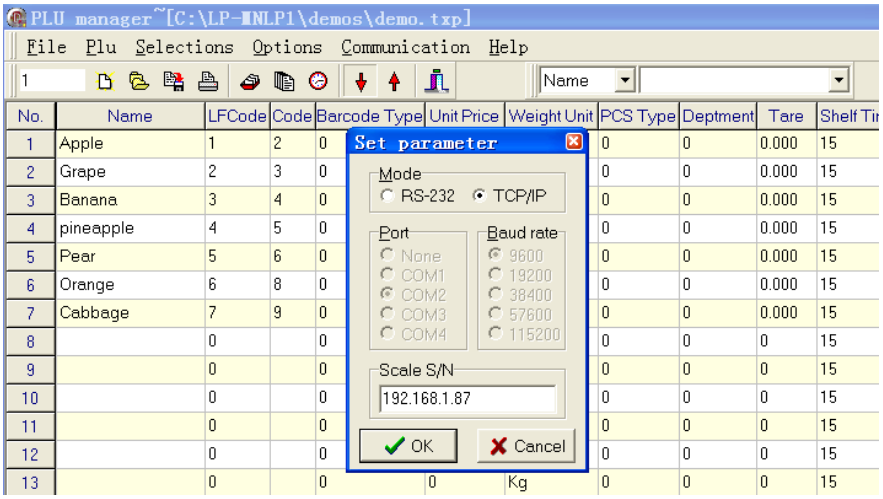
You can distribute the hotkey by “PLU manager”.

1) Download a PLU file:

Click , select a PLU file, and click “open” to download it.

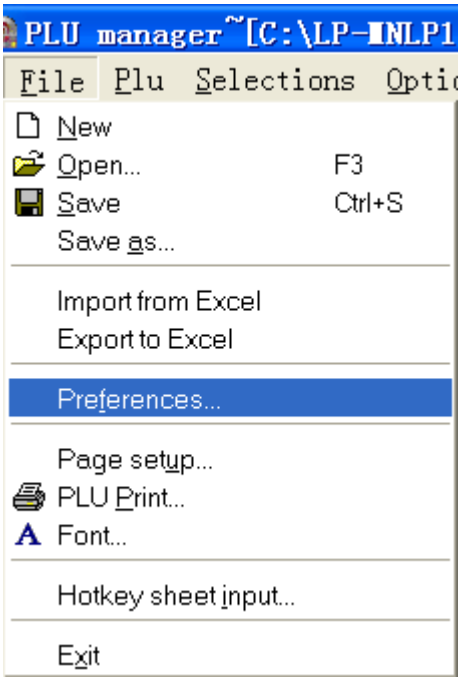


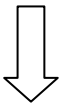
2) Click button to download it to the scale.

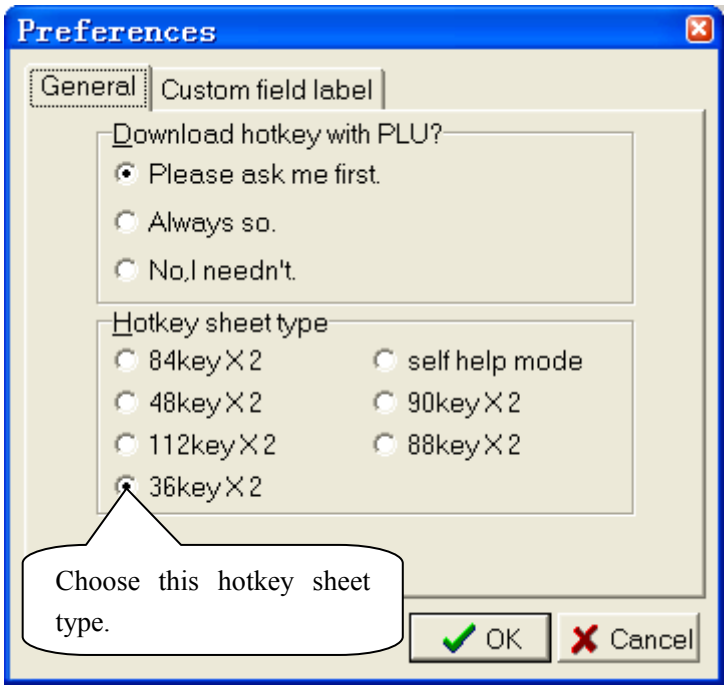

PLU manager~[C:\LP-■NLP1\demos\demo.txp]
File Plu Selections Options Communication Help
Name
No. Name LFCode Code Barcode Type Unit Price Weight Unit PCS Type Deptment Tare Shelf Tir
1 Apple 1 2 0 0 0 0.000 15
2 Grape 2 3 0 0 0 0.000 15
3 Banana 3 4 0 0 0 0.000 15
4 pineapple 4 5 0 0 0 0.000 15
5 Pear 5 6 0 0 0 0.000 15
6 Orange 6 8 0 0 0 0.000 15
7 Cabbage 7 9 0 0 0 0.000 15
8 0 0 0 0 0 15
9 0 0 0 0 0 15
10 0 0 0 0 0 15
11 0 0 0 0 0 15
12 0 0 0 0 0 15
13 0 0 0 Kg 0 0 0 15
Set parameter
Mode
RS-232
TCP/IP
Port
None
COM1
COM2
COM3
COM4
Baud rate
9600
19200
38400
57600
115200
Scale S/N
192.168.1.87
OK
Cancel

11 HOW TO CREATE AND PRINT HOTKEY

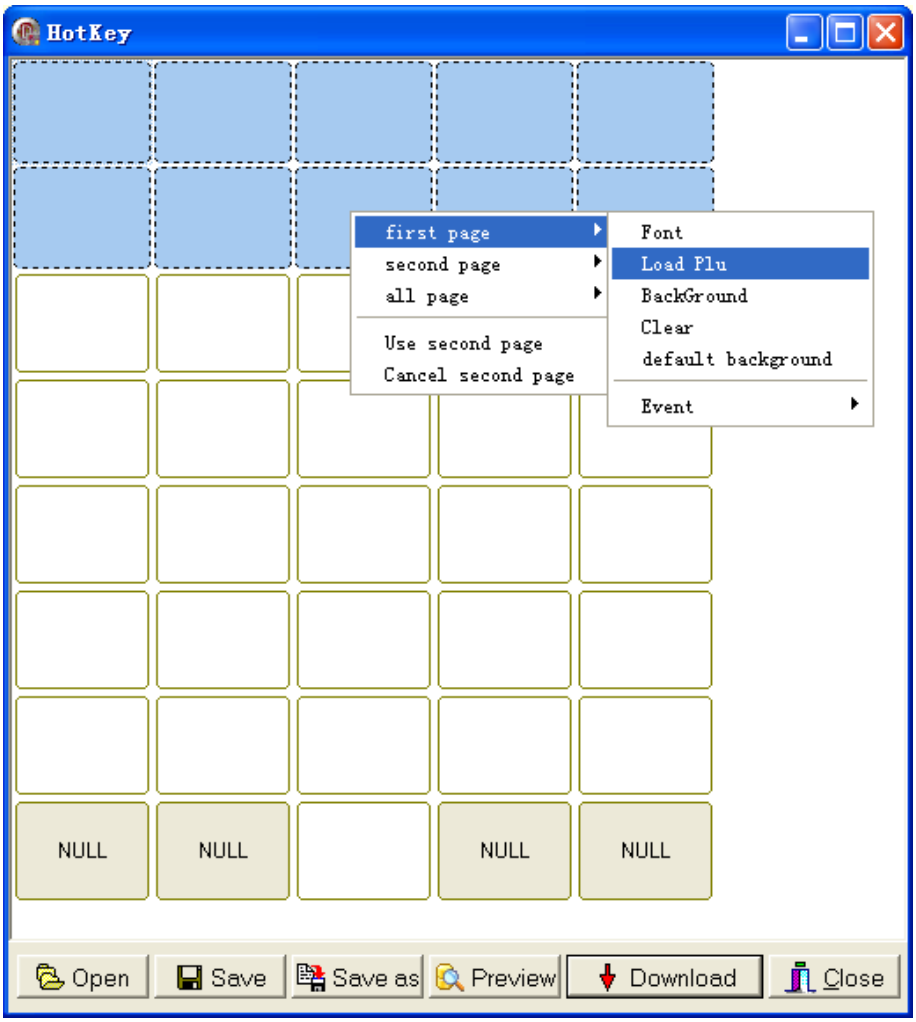
1. Choose ‘Preferences’ in PLU Manager:





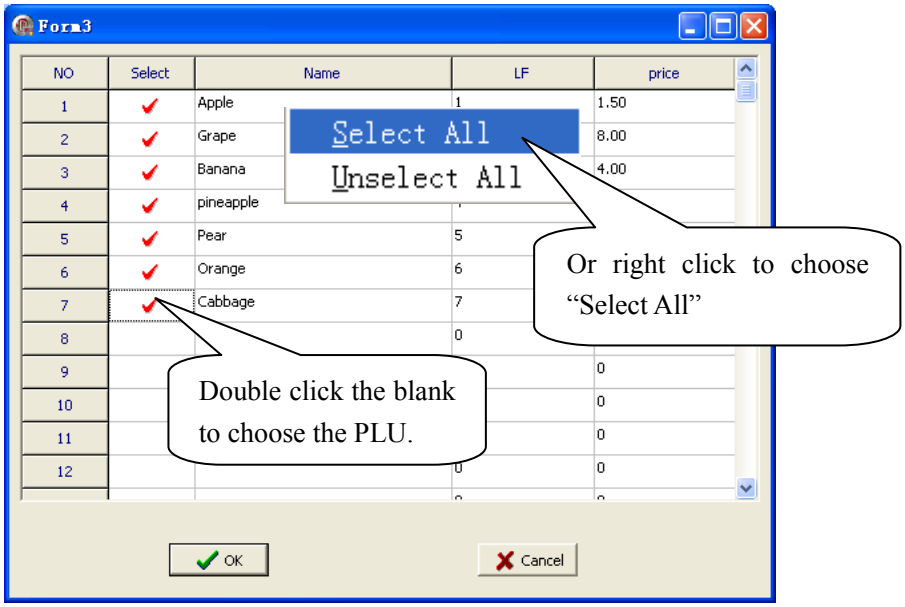


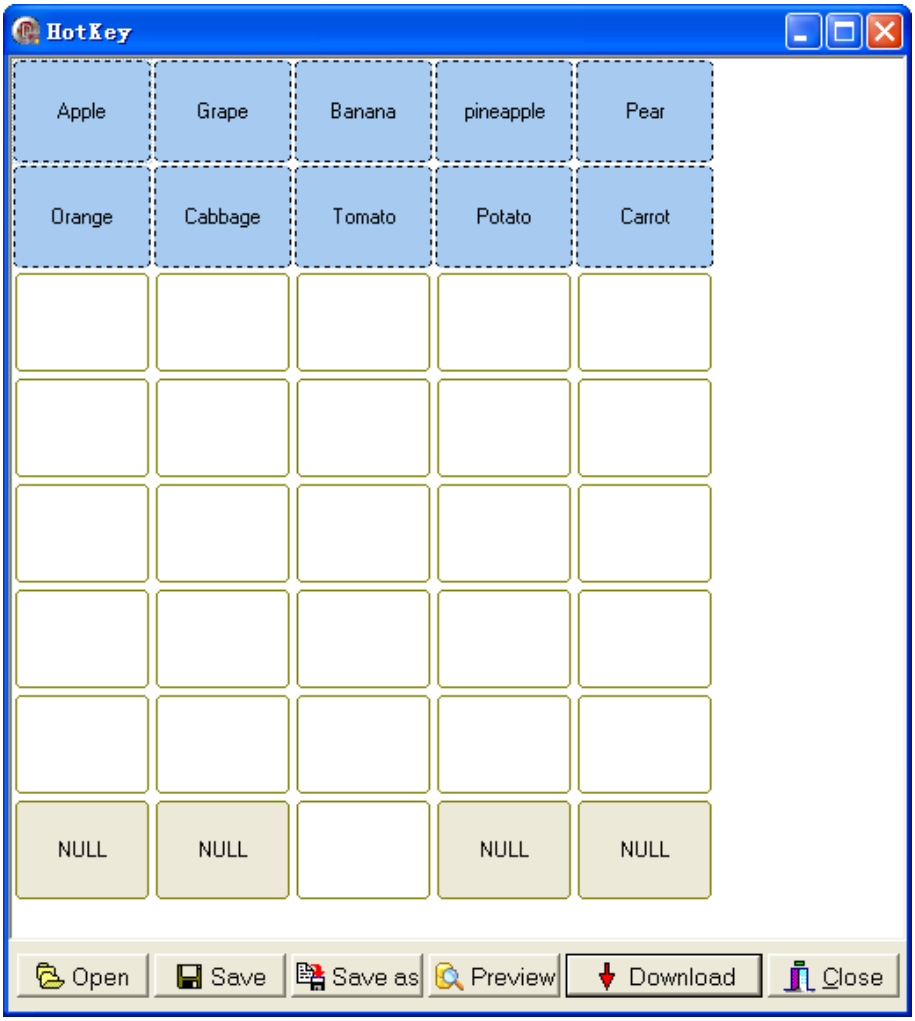
2. Click ‘File/Hotkey sheet input’ to set the hotkey table in the following interface:



first page: Font --- set the characters’ font on hotkey table.

Load Plu --- click this item, you can choose the PLU in the pop-up window:





Background --- set background color for the hotkey table.

Clear --- clear all messages on the hot key table.

default background --- set the default background color of the hotkey table.

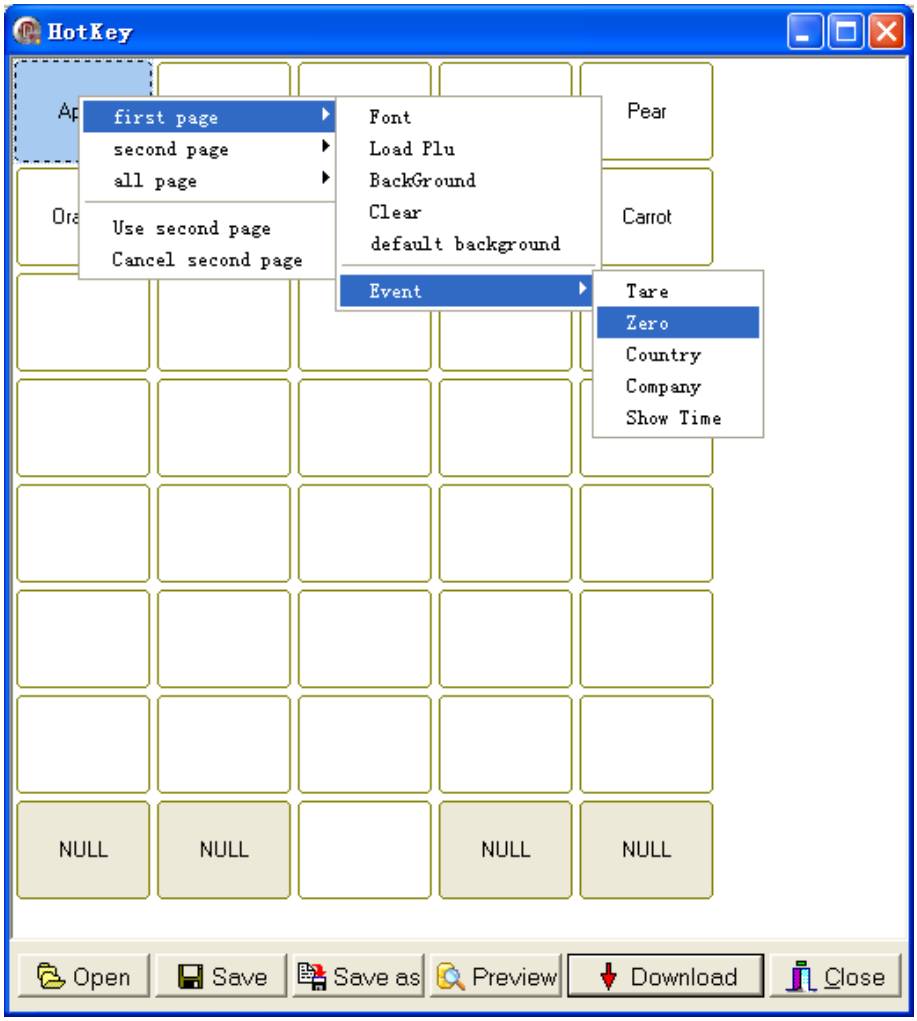
Event:

1) Tare
2) Zero
3) Country
4) Company
5) Show time

Note: Users could set any one of the 72 numerical key as Tare, Zero, Country, Company or Show Time.

E.g. the key No.1 has been set for the hotkey of apple. If we choose 'ZERO' for key No.1 as the following picture, it will be a hotkey of 'Zero' rather than a hotkey of apple. But the functions of other hotkeys still remain.

Analogically, if we choose 'Show time' for key No.2, its hotkey function as grape is deleted. And the current time will display on the LCD of the printer if we press key No.2 next time.



Second page: you can set two levels of each hotkey. This item is to set the second level on hotkey table. It is similar to the item 'first page'.

all page: Font --- set the characters' font on hotkey table.

Clear --- clear all messages on the hot key table.

Default Font --- set the characters' default font on hotkey table.

Price Visible --- set whether to show the price of each PLU on the hotkey table.

Load Image --- set image for the corresponding PLU.

Delete Image --- delete the selected image.

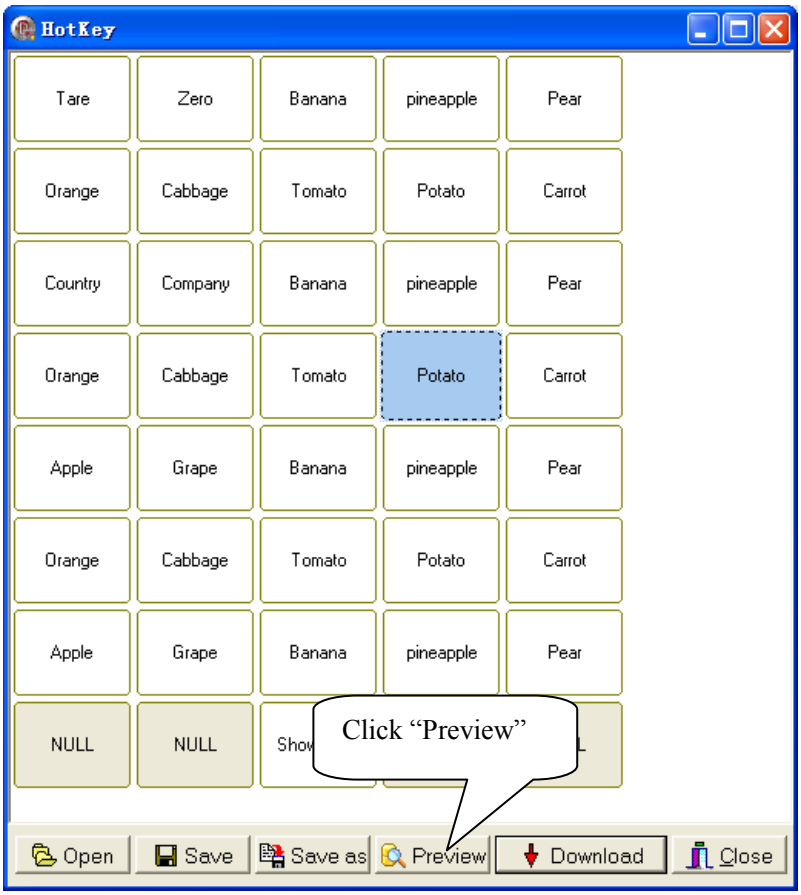
Use second page: choose this item to use the second level on hotkey table.

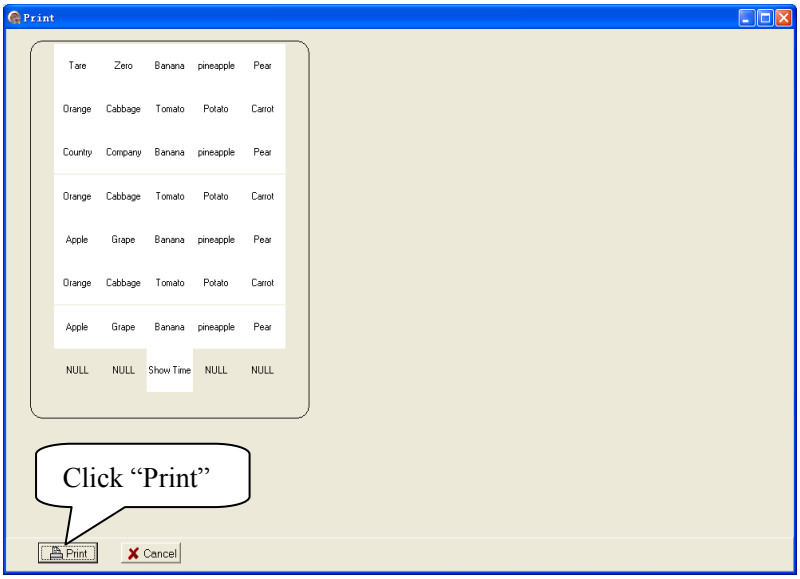
Cancel second page: this is to cancel all messages of the second level on hotkey table.

Note:

1. **If you want to sell the PLU by using second page hotkey, please press key [PLU] and then enter hotkey number. For example: use hotkey 37. Press key [PLU][37].**
2. **You also can create the hotkey table by this method: click 'File/Hotkey sheet input' to enter the hotkey setting interface, press the button 'Create', and then the whole hotkey table will be created automatically.**

3. Preview and print hotkey sheet

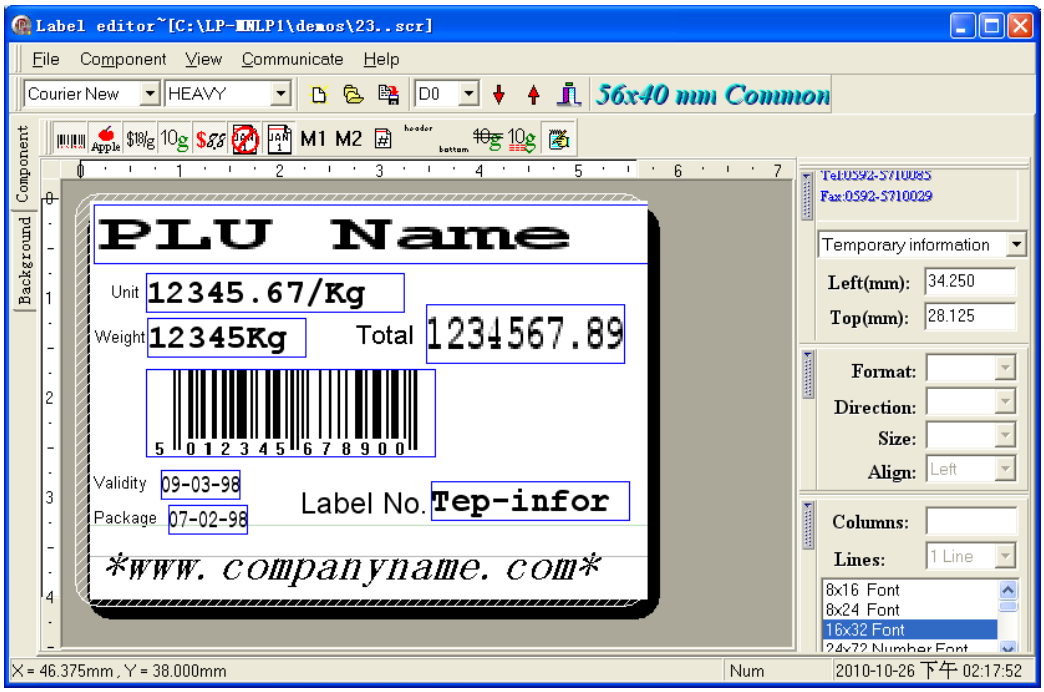

HotKey
Tare Zero Banana pineapple Pear
Orange Cabbage Tomato Potato Carrot
Country Company Banana pineapple Pear
Orange Cabbage Tomato Potato Carrot
Apple Grape Banana pineapple Pear
Orange Cabbage Tomato Potato Carrot
Apple Grape Banana pineapple Pear
NULL NULL
Click “Preview”
Open Save Save as Preview Download Close



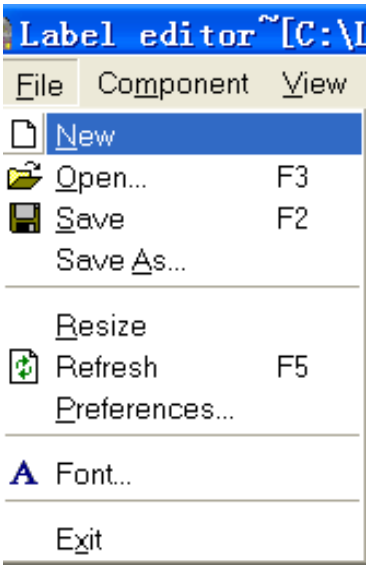
4. Cut a hotkey sheet down and insert the hotkey sheet into the keyboard.

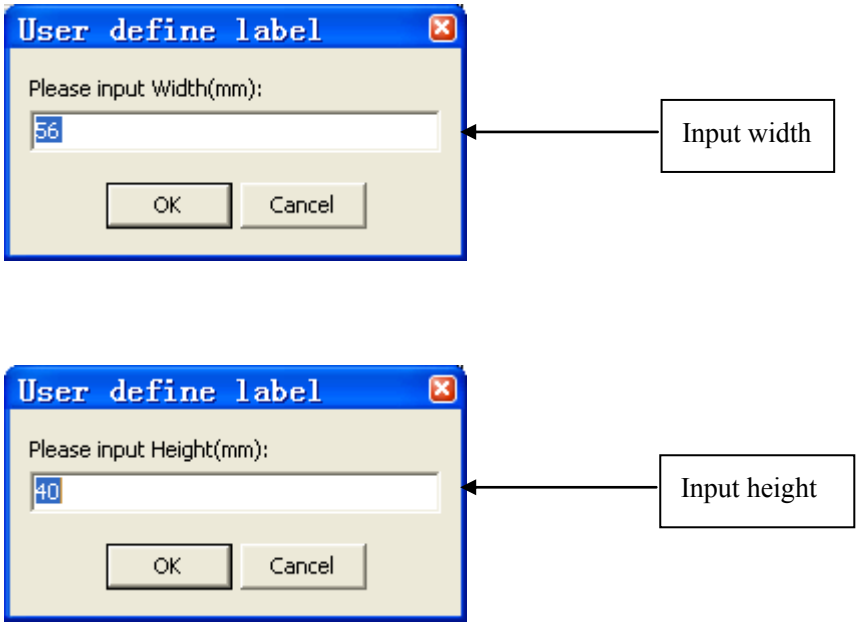
12 LABEL DESIGN

1. Open link32, and Click to open “label editor”.



2. Create a new label:

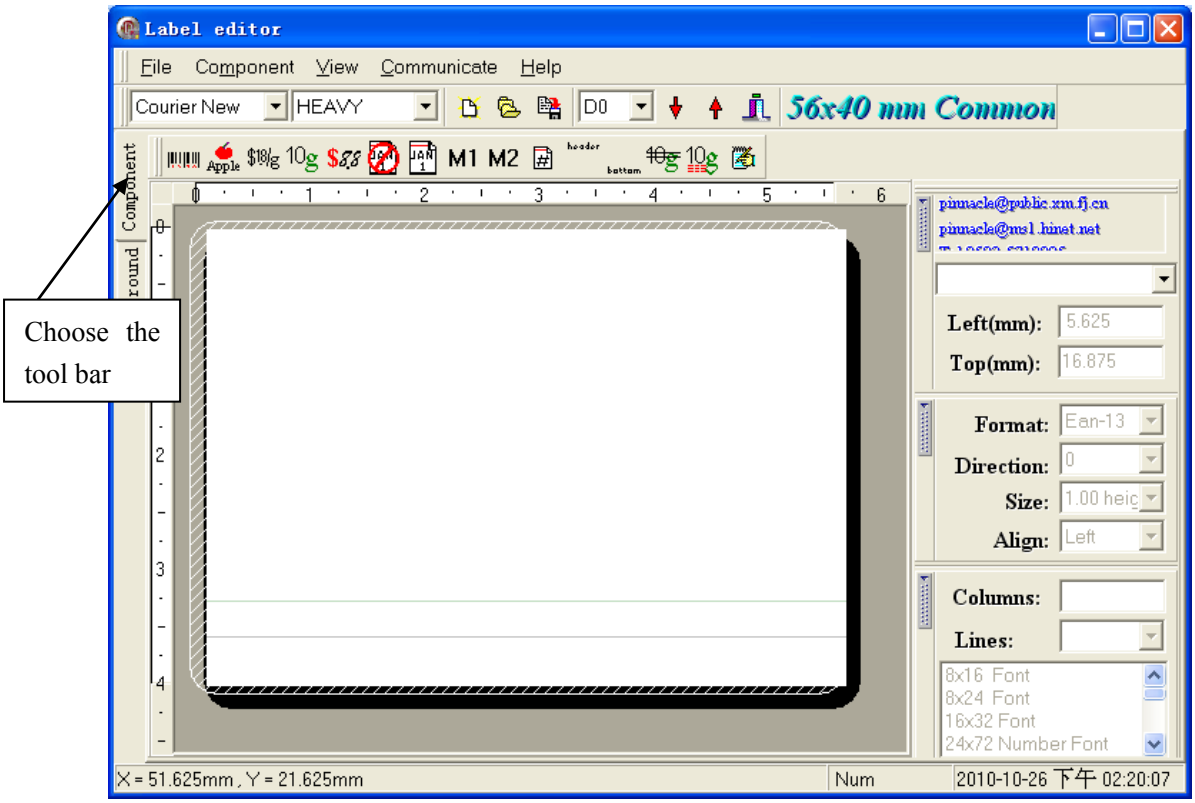




Note: in order to compatible with 2 inch machine, when 3 inch machine creates a new label of D0 or D1 format, D0 or D1 cannot be set into a big label format which is the width can't be longer than 56mm. Namely, if 3 inch machine creates a new label which the format is any one from D2 to D41, the width of the label can be set longer than 56mm.

3. Edit the label

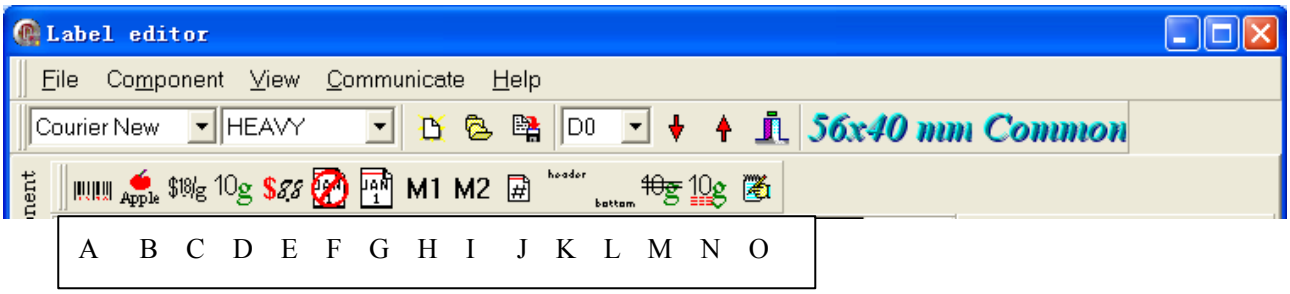
1) Choose 'component' tool bar



2) Choose the components and edit them.

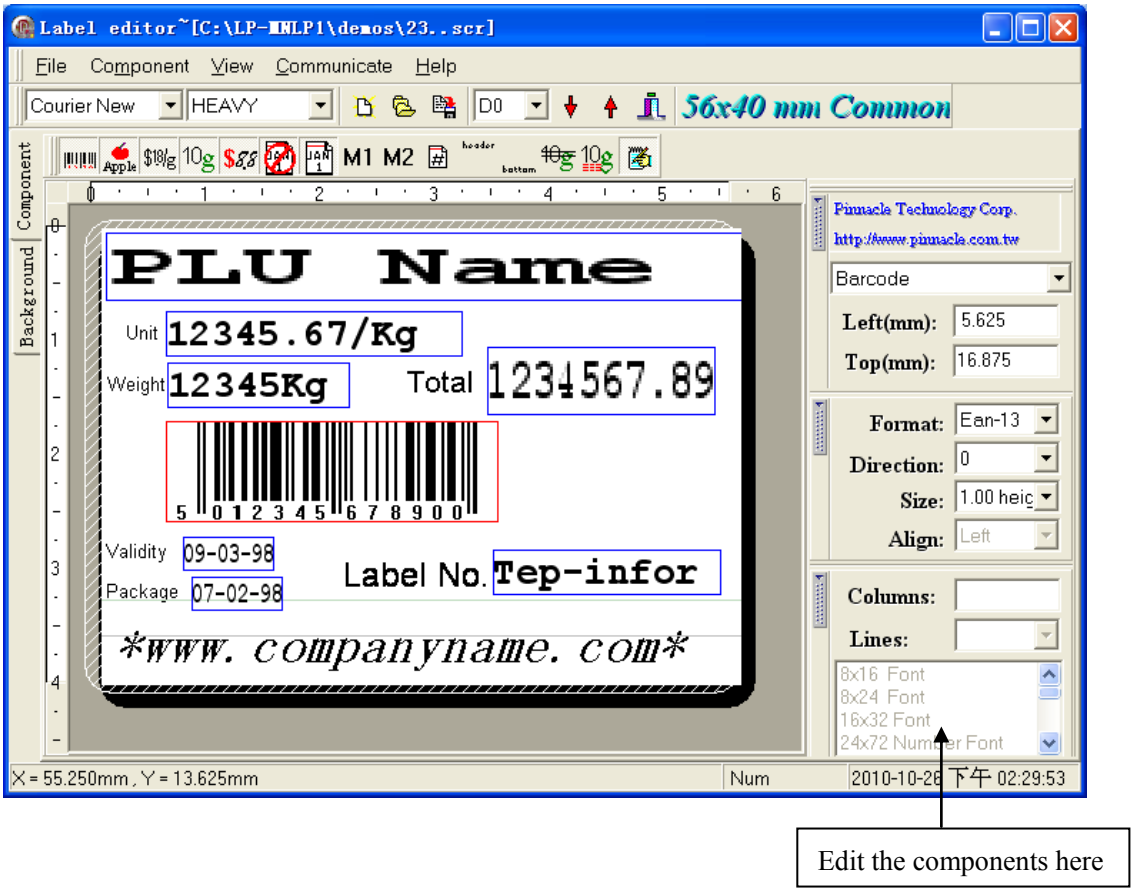
Click each item in tool bar and then click the label, the label component will lay in the label, select the component and keep it, the component can be moved to any position. When you are editing a barcode, you can change the direction of the barcode by changing the value in right column 'Direction' item.

Click the item in the tool bar again to eliminate it; or you can click the component in the label and hold it, and then drag it out of the label to eliminate it.

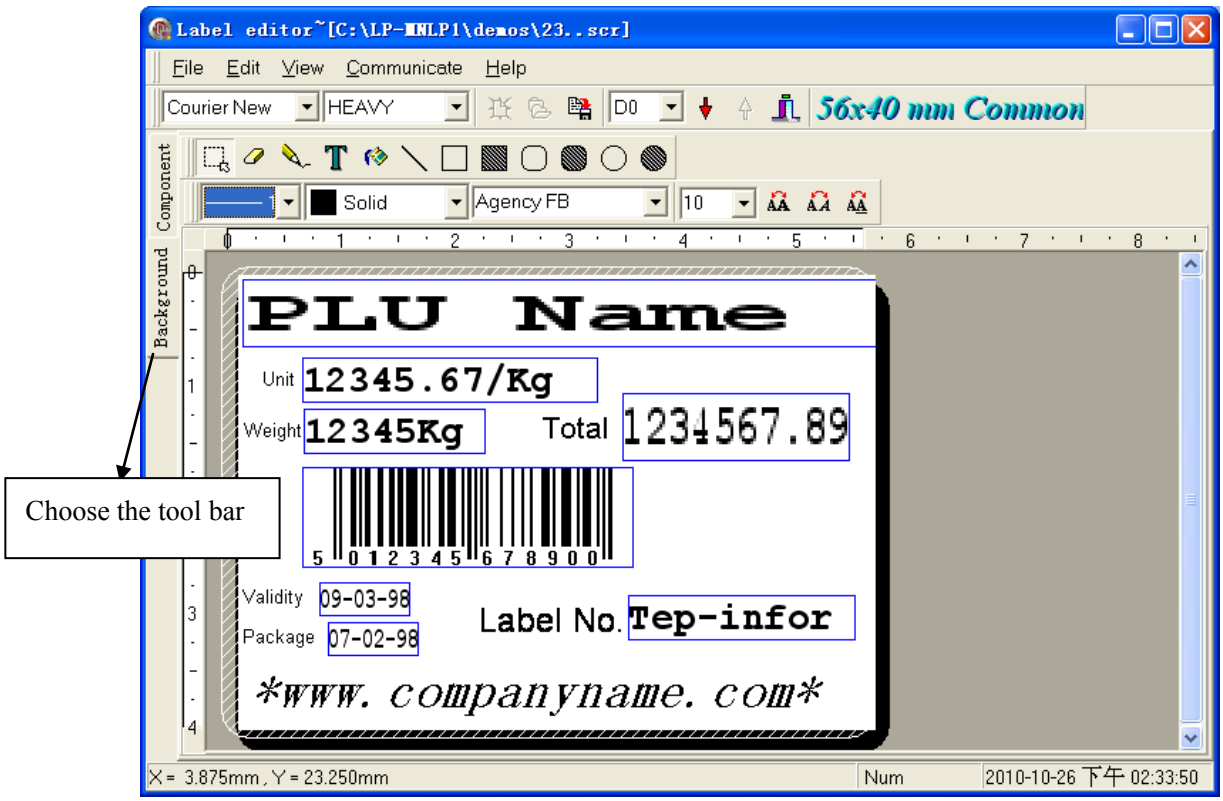


A , barcode ; B , PLU name ; C , average weight ; D , weight ; E , quantity ; F , period of validity ; G , package date ; H , Message 1 ; I , Message 2 ; J , fresh code ; K , head message ; L , foot message ; M , tare ; N , Gross weight; O, Temporary information.

Note：The temporary information could be set as label number.

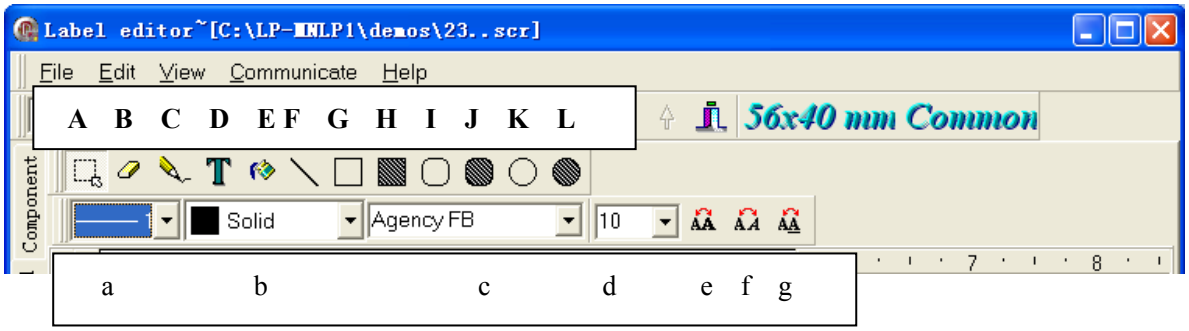


3) Edit background picture



Click the item in the tool bar, and then click the label to edit the label background. Click to select the background and keep it, the background can be moved to any position.

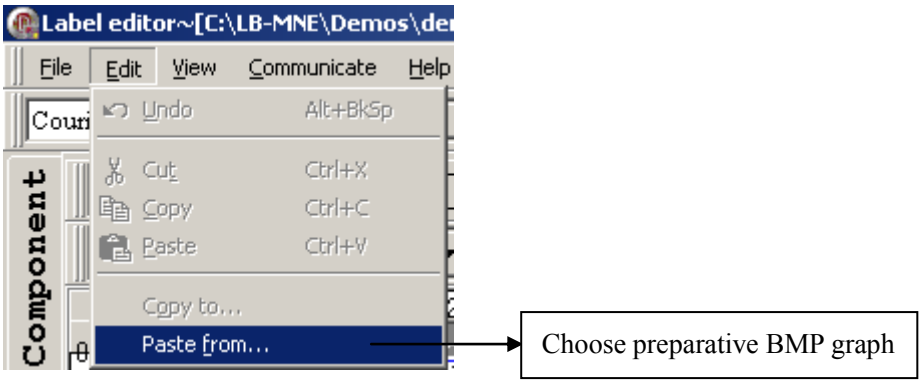
Click to select the background and keep it, and drag it out of the label to eliminate it; or you can use rubber in the tool bar to erase it.



A. Select; B. rubber; C. pencil; D. Text; E. fill in; F. beeline; G. rectangle
H. Fill in rectangle; I. round angle; J. fill in round angle rectangle; K. round; L. fill in round
a. Line thickness; b. fill in type; c. word font; d. word size; e. bold font f. italic g. underline

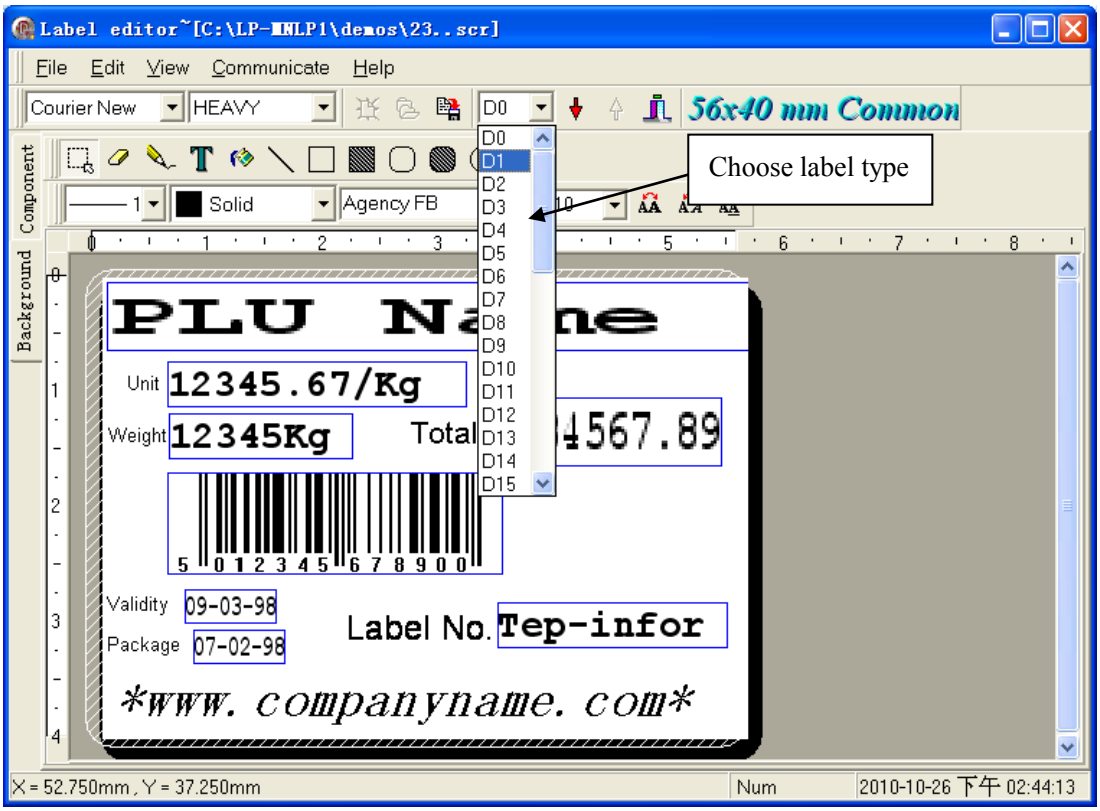
4) You can also paste a preparative BMP graph as the label background picture.

Note: this operation is dispensable.

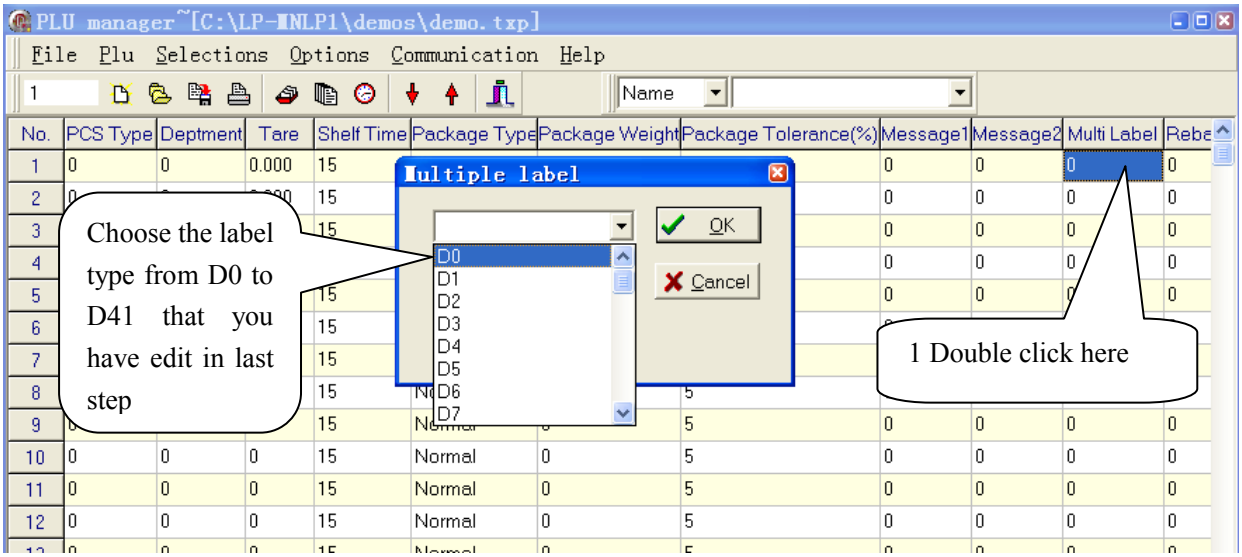


5) Save the label

A kind of PLU can edit forty-two types of label, before you download the label, you need to choose label type. So, before saving, you should choose label type.



Choose label type you have edited and downloaded in LAB.



Note: the label you have chosen in the Multi Label column of the PLU Manager should be edited and downloaded to the LP1 printer in advance or you will hear the error “beep” when print this label by pressing this PLU hotkey. If you don’t choose the label type, the system will auto-choose the default the label type D0 or D1.

6) Set Label Number

After saving the label and downloading the label to the printer, please set label number in the printer.

a. Press key SHIFT CONFIGURAR in the printer for about 2 seconds to enter system set mode.

b. Use key J or O to select the item ‘Label No.’ and press ENTER/COPY COPY N .

c. Then system prompts: <0: close 1-50000: Use>. Input number on the printer. If you input ‘0’, the label number will not be printed out on the label. If you input a number from1 to 50000, the label number will start from the number you input. Then press key ENTER/COPY COPY N to confirm.

E.g. If you want to set the first label from No.2, and then you should input 2 in the printer. Then the second label number will be No.3 and the like.

13 SYSTEM SET MODE

Press key

for about 2 seconds to enter system set mode.

Use key

or

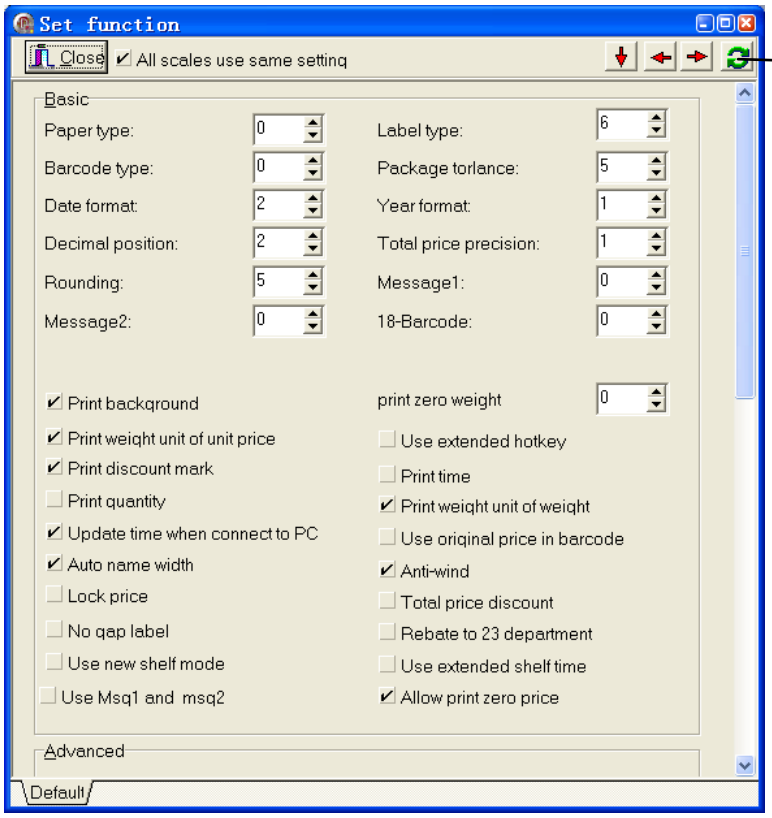
to select system set items:

Hotkey	System set	Description
	<DATE>	Set date and time
A	<ALIGN>	Use arrow key to select one of the 17(-8~+8) different kinds of the excursion and to adjust the paper to the most suitable initial state.
L	LABEL SELECT	Choose default label type D0 or D1
	Label NO.	Set label number
S	PAPER	Using arrow to select paper type: label or no rewind
N	DATE FORMAT	Set date format.
	PRINT WEIGHT UNIT	Whether print weight unit
	PRICE FORMAT	Set price format
X	AMOUNT FORMAT	Set decimal point for total price.
	BARCODE SET	Set barcode type
W	PRINT TIME	Set whether print time or not.
K	ROUND	Set round input a digit range from 0 to 10
Y	YEAR FORMAT	Set year format (2 or 4 digit).
D	DENSITY	Select printing density from “-1” to “5” with arrow.
E	MESSAGE 1	Set MESSAGE1 value.
F	MESSAGE 2	Reserved
	BARCODE LINE WIDTH	Set barcode width in label
	ANTI WIND	Open anti wind function
V	SPEED	Set print speed
	STAT. MODE	Enter statistics mode
	STAT. WARNNING?	Whether giving a warning when statistics data full
	SCALE TYPE	Set the type of scale
	PRN TUBTOT	Print summation label
	PRN ALL STAT. PLU	Print statistics data by PLU
	CLR STAT.	Clear statistics data

13.1 Set parameters in PC software

Open link32, and Click ,

Figure function setting (part 1)



Explanation:

Click it, then the parameter in this dialog box will back to the default status.

Export the current parameter in this dialog box and save it as a *.hex file.

Download the *.hex file of the parameter that has just been saved in last step.

After set all the parameter in this dialog box, click it to download the parameter to the scale.

Basic functions explanation：

Paper type：0:label；1:receipt ；2:no-rewinder.0 is the default.

Barcode type：0~99 (refer to barcode type table).

Date format：0: DDMMYY; 1: MMDDYY; 2: YYMMDD (D，date；M，month；Y，year).

Decimal position：0，1，2；Set price decimal digit.

Rounding：Set round carry digit.

Message 2：Reserved

Display darkness：Reserved.

Label type：From D0 to D41

Package tolerance：1~20

Year format：0：YY; 1：YYYY.

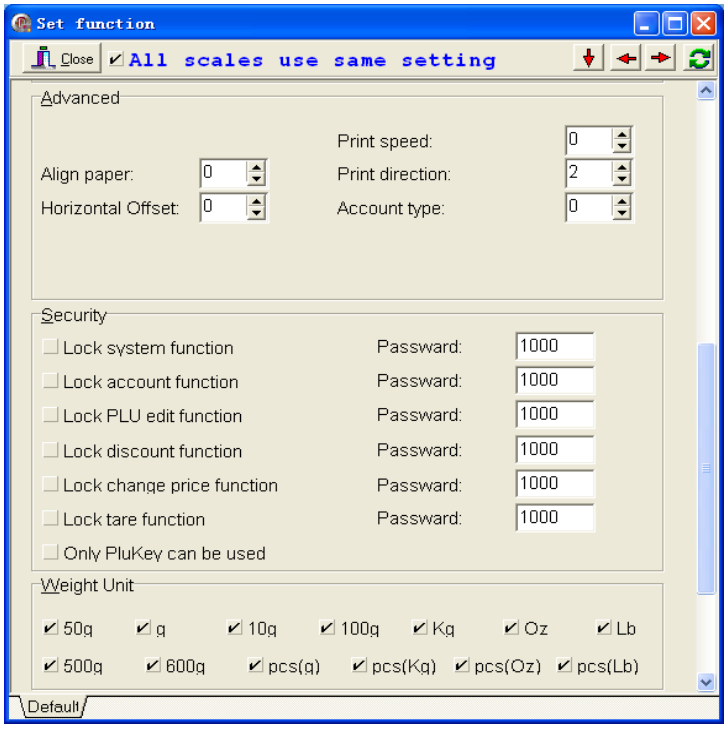
Total price precision：1: N.N0; 2: N.NN; 3: N.N.

Message 1：0~197 message. If PLU data hasn't set message1, this PLU data will be the default.

18 -barcode：0,width 2/5; 1,narrow width 2/5; 2, Ean 128; 3, narrow Ean 128.

Sale date adjust: The valid date and sale date are related in time: valid date=sale date + sale date adjust, or sale date=valid date – sale date adjust. You can set the sale date adjust here to confirm the time interval between the valid date and sale date.

Figure function setting (part 2)



Advanced functions explanation:

Print density：Reserved. Setting on the scale.

Align paper：-8~8 adjust print position.

Horizontal Offset：Reserved.

Print speed：0~7; 0: the fastest speed; 7: the slowest speed

The lower the speed is, the better the printing impression is.
(Note: don't set too low speed, or the lifetime of the print head will be shortened)

Print direction：0~1; 0: Horizontal; 1: Vertical. This is to set the print direction of all the label in this software.

Account type：Reserved.

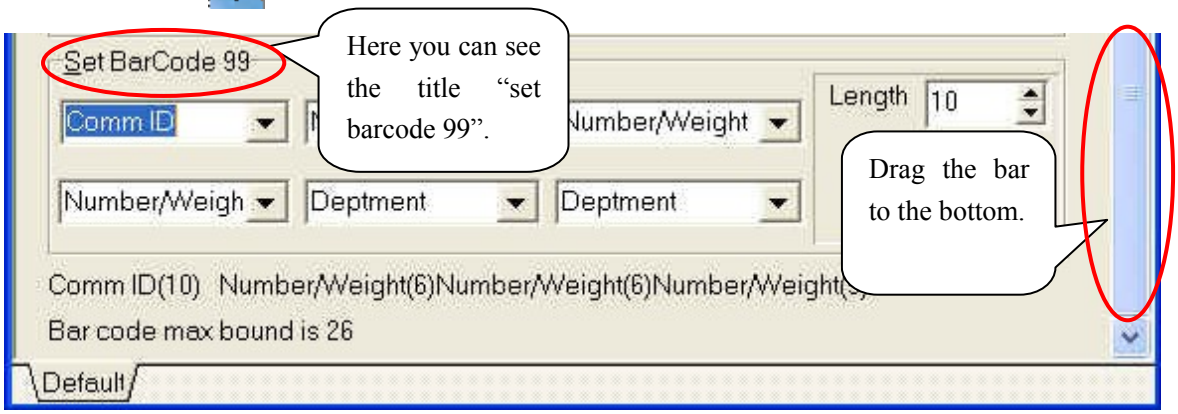
Security functions explanation：

Set the password of the scale lock function.

Weight unit：Set the unit of calculating price.

13.2 Set barcode

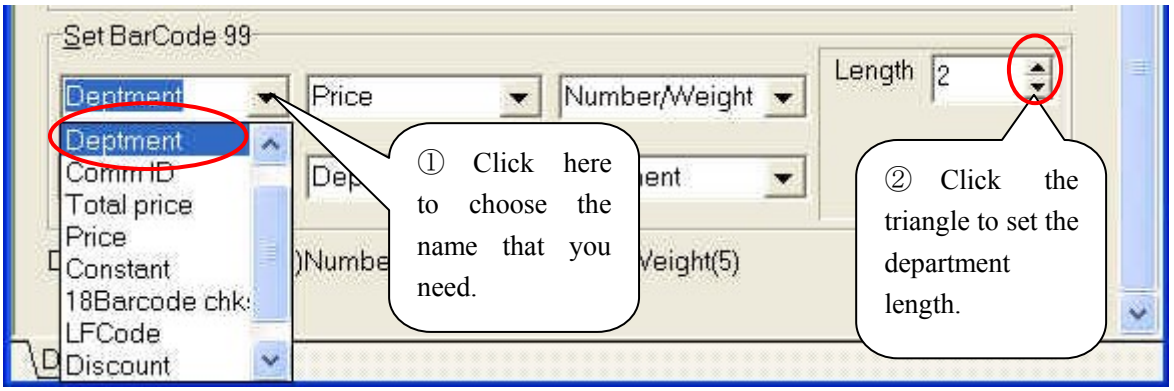
Open link32, and Click ,



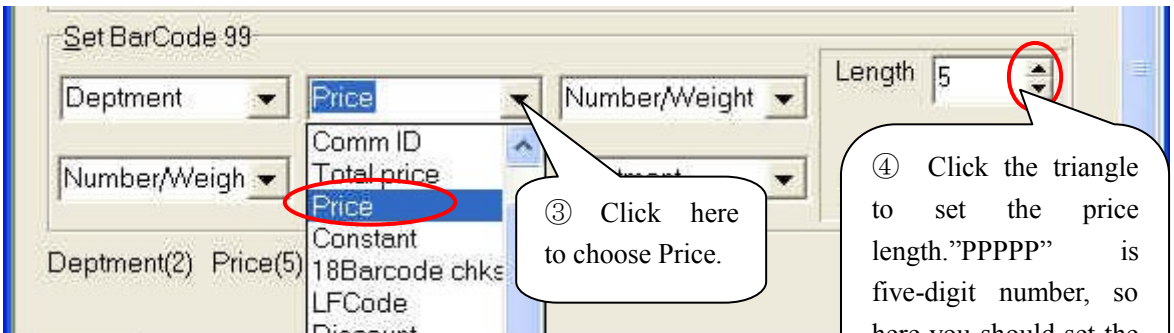
Let's take an example to explain how to set the barcode.

If you want to print the barcode in this format:23PPPPPWWWWWC, where P is price,W is weight,and C is control, you can follow below steps to set it.

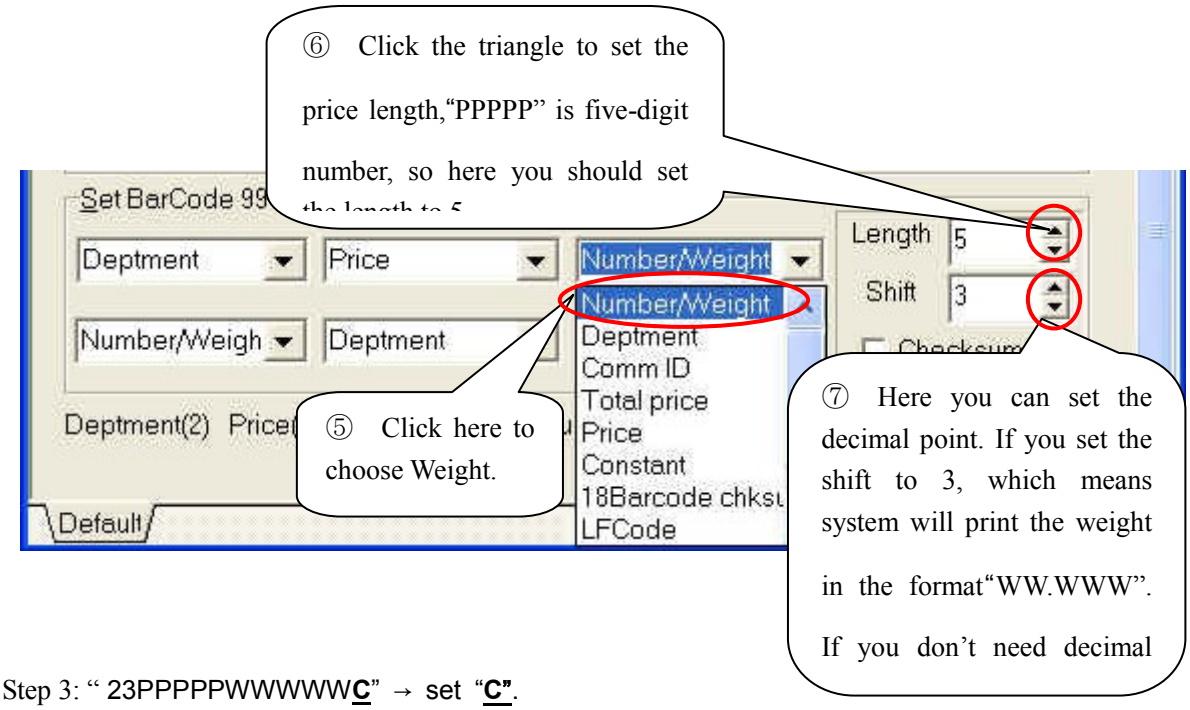
Step 1: " **23**PPPPPWWWWWC" → set first two number "23". You can choose the name that "23" stands for, such as "23" stands for department.



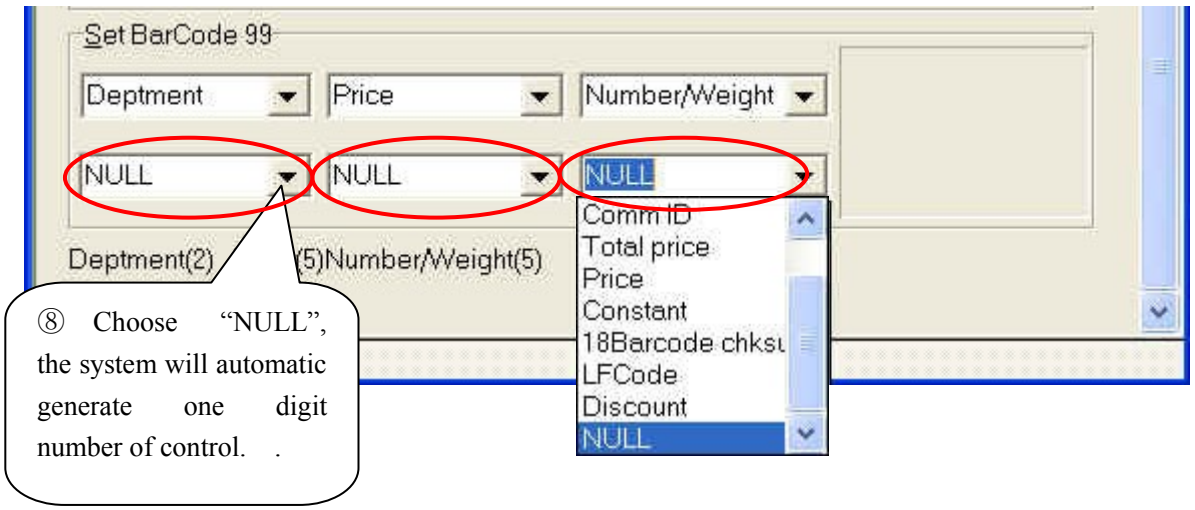
Step 2: " 23**PPPPP**WWWWWC" → set **PPPPP**



Step 3: “ 23PPPPP**WWWWW**C” → set **WWWWW**



Step 3: “ 23PPPPPWWWWW**C**” → set “**C”**.



Note: if you want to set more digits of barcode, you can set them by the above method.

14 PRINT LABEL

The printer supports 10000 kinds of PLU. You can set 72 kinds of them to hotkey.

PLU	Method	Example
PLU which hotkey number is in the range of 1-36	Press the hotkey number directly	Sell PLU which hotkey number is 20
PLU which hotkey number is in the range of 37-72	Press key and hotkey number	Sell PLU which hotkey number is 56 +
PLU without hotkey	Press key and the PLU LFcode	Sell PLU which LFcode is 69025, and has no hotkey number + [69025]

Note: if the LP1X isn't connected with the scale, then you should choose the unit of the PLU as 'PCS', or the label cannot be printed. Please refer to Chapter 7, Point 1.